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SEQUENCE LISTING

<110> Vogeli, Gabriel  
Wood, Linda S.

<120> Novel G Protein-Coupled Receptors

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OFFICE OF PETITIONS

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<170> PatentIn version 3.0

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atgttacctt	aaaatagggc	aattgaagga	tctttcaaga	agggacaagt	tgtaaaggtg	180
ggcagcacia	agggaaccca	acaaaaaatg	aagacctggg	gggacaggga	cagagtgact	240
ggatgcttga	gagacccaaa	gctgcaaagg	aaaggagcaa	ggggaacaat	acccaccctt	300
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aaaccagcc	agaagccagg	aagcatgaga	gttcagctga	tgcagcccat	acagatcaga	420
ctcctggact	tcagagtggg	ggagggtgag	agggatgaag	tctggaggca	ccaattggga	480
aggccatcca	gaatgctcct	attctgtttg	ggagctgggg	atgggaatgt	cccttcctga	540
ggggatttta	tggaataaat	caaatacaat	cacagaaatc	aaatcacaga	aatcaaagct	600
ggagattctc	tctccctcta	cttgctggca	gccaggatgt	gggtcatga	cctaaactca	660
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ggctcacacc	t					731

<210> 22  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

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aactgaactg	gactccaaca
tccagtgaag	ctcctccact
	120
catcctttta	gctggaccct
ctggggacca	agacagcaga
ccagctgcct	cttctacagg
	180
gcagccctcc	aaatggctgg
ggccactgtc	ttctctgcac
tagaagacct	ttctatggta
	240
gtatccttcc	acataagcta
tgacttctat	tcccaggaaa
gcctgatttg	tctcctctaa
	300
atgcacttcc	acttatctgt
gacctcttta	caatgaaatc
agagagagat	aaccctgac
	360
ttctaactca	gagcaagcaa
gctcccaggt	cttcagaggc
cctgcagggc	acacagatga
	420
cagcgatga	ccagagggca
catgccttgt	ctaaagggga
tg	
	462

<210> 23  
 <211> 692  
 <212> DNA  
 <213> Homo sapiens

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ctatggcttc	agctagttca
tttgctaagt	tacctagagt
	120
ggttgacaga	tttctaatta
tacgttcatg	agaggttact
ccccactatt	gcaagagact
	180



tctgccaaac ataggccaaa attcatctcc ttggtttgca ggtacagttt gtctaatect	240
ggaaaaataat ttcaatgaac tacttcagcg ttcagaaaca ttggagttat aaatagaaag	300
aggaagagcc acataacctt atagacaatt acctctcata tgccagtggc caacacattc	360
ataagcccat gtgtgcttga tccagggacc acacagggtc cctgatggat tctgaaattt	420
aaggcttttg attactggta acagagacat gttaaagtac atgtcttcag tcttgagtag	480
agtgtaatca gtctgatttc tttttttttt taatgagaca aacatcaggt aaagaccttg	540
acaagaagga agagaaatcc cgagattcta taatcataat aatcgaattg taattgctag	600
tttaagtagt ccttcaaaaa tacatctcat tcctgacagg ataaaacaag ttttataaaa	660
tatattatat tctgggttca ctagggaac ac	692

<210> 24  
 <211> 669  
 <212> DNA  
 <213> Homo sapiens

<400> 24	
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agaggaatgt gggttgaatg gttcattcat gctgtggctt taatttactg taagagcttg	180
attatacaca ttctcaaagg cattggaaag ttaaaagaaa gtccttttag gtagcagtc	240
atgacaaatg cagttcatga aatctgtgtc cttttcattc ccttctgagt aattcctctc	300
tgtctctatc aaagccttgg atactccatg gtttactagg cagaaactta tccatccaac	360
acagccacat ggatacagct ttgtgctttt agacaataac cacttgagaa aacctgacct	420
tttccccac ttttcattca gcttctgtcc tgctgaaaac aagaggacat cctgccacat	480
tgatcatctg tctgccttac tcttgagaag tctagttggg aaaacaggcc ctataaagag	540
agacactgca atgcatggg gtgaggacaa taaaagtgat ggcagcagag cactggagag	600
cagaggtggg gtcaccaact gcccaaattg cactgtcccc tcagaactct tgcatttgc	660
tttaacgca	669

<210> 25  
 <211> 654  
 <212> DNA  
 <213> Homo sapiens

<400> 25

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ggcatatatt taccactccc aaggaaatag ctaataaagt aatagagtac agattaaaat	120
aataaaatcc aaatttaatc catcacattg acaatgatta aaattaaatt taaagcagtg	180
ttgggaagaa tacagtgage tgggtgccat acacactgtg atgagagtgt agaaatctta	240
cagtcttacc agaaagcaaa tgtatcaaac actttcaaaa tggtcatact tcctaaccta	300
gaaattccac ttttaagaat ttctcctaag aatatatctt tgtttaaaaa tatttacata	360
caaagatgtt gatttttagta ttattttgaa agcaaaataa cccacagaat ctcaagtata	420
tgatccaaac aatggaatat cttatagcca ttaatttttag agatgaatat ttaataattt	480
aggaaaatac ctatgatact ttaaatttta aaaagttaca tagcagaaga ggccatattt	540
caatttttgc cttggaaaaa tatggtatca ctacagaaat gttgtagtgt tatcgctgac	600
aacactagtt atctaggata aagggatatt ctcatcttca tttcaccttt agta	654

<210> 26  
 <211> 687  
 <212> DNA  
 <213> Homo sapiens

<400> 26	
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ttaaaatcaa tctttcaatt ggataagagg cagggaaatt agcttggaag gtaaacttat	120
tatccagagg caaaatttca tgggctttga taaagggtga tatttttcga taaggaggaa	180
agagttaaatt ttactaacat actttggcct ttgttcagtt ttcttaacct ctattttcgc	240
tttattatatt atttttttgt ttactcttg ggaaagcaaa ttatttgttt tctcacatct	300
tttggggtcc aattttgatg attctgatct tttttagttg cttgacctgt agacctcta	360
cagaacattg cagggcctct tctcagagga gcagcgggtga tgagcttagt ttcttaggct	420
gggactgttg cgctggactt gacaggtgaa ctgaaaattg cagggataag tacacctatt	480
gagaacaaac atcccatctc tttatcaaag ctcttcattg gctttggaaa actgctgtag	540
gcctaaggaa actaaacttt ctagggatat tctaggtttt aaacatatga gaaagagaaa	600
gacgtcgggt cttatttaag agagtttatg agaccttatc cttgaaatag tcaaatttat	660
aatgacata aggctgtatg tgtagtt	687

<210> 27  
 <211> 622  
 <212> DNA

<213> Homo sapiens

<400> 27

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ataaaataca gatctgattg tgtcactctc ctgcttaata tttgtagttg accctccac      60
tgctctcatg aaagttcata atccttactg tgggtgtaaa tgccctttta tgatctgtcc    120
cttgccatt tgtgtacact catcttgtgc tactctcttt ctcatcaat atgctccacc    180
atactgtcat cttctgtctt atttttttta aaaaagtatg gaacatctct ttccccttat    240
gtgtcttatg caacctgtca gacaaaacca catgttatat tttctcaaca cacaatttta    300
tttcaggctt ctgtgccctt tacaaatcta ctaatctttc tgtctggagt gttctttctt    360
ctcctggcca aattctaata atttgtcaag agtgcaacag catcatttct tctgtgactc    420
aattctccaa gcatcgtatc ctctgtgttc ctatagcact acattggatc ggtccataac    480
aattctgtca gtgtattata agaacttatt tacaggtttt gtctcttcta ctatggcgtg    540
agccttttag tcatatgaat tgtgattttg tatatttagc gcctaccatg gtgcttaatt    600
cgtggtaggt gctcggtaaa tg                                           622
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<210> 28

<211> 684

<212> DNA

<213> Homo sapiens

<400> 28

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aacttttcaa aagaatatct tgtaacatag aataacagat cctagtgcac taccactct     120
ttgggcttta tcgcttttcc accatcatta tctgcatcac tgccctgcagg ttttctacac    180
ggccagggtt ggtctctgcc tgctcaatag tcaagtcaaa agaggcagga aattaacacc    240
ctctggaggc agcctttgag gaatgatcca tgggaggtgg agtataaata cctcagctct    300
gtttcctcta gagatataac taaggaatgg gttttacatt gtttctcaga gtttcctcaa    360
ggtttttaac ttcaatcacc cacaggggta gtgggcttta tcatagtata catcctttgt    420
ggcttccctt cttctttgtc tcaattctcc attccaaact aggatttatt tcttttccct    480
aaaacaaaac aaaatgttta acctgaaacc cttacaaaac acgtaaaatt tatatttaaa    540
aaatctaaat atttgaggag agaacgaaac ctaagtatat gccaggtat aacacgattg    600
gtggagatag ctttaaaaaa gttcctgaaa aatttagttt ttaaaagggt accctagtag    660
aagtgactt aactgcctaa tttc                                           684
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<210> 29  
 <211> 731  
 <212> DNA  
 <213> Homo sapiens

<400> 29  
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 aaagccttcc aagttctctc cttctgcagc ataaagagac aataactcag aggaaggtat 120  
 ccccaggagt ttccagacag ctgcacagat ttaagtgcag aaatctgagc agaggtatag 180  
 tcctggcatt tacatgaaca cctttcagta gcaggaagaa taaatggaaa gagagctaca 240  
 gaaataaccag gggcgaagtc ttcattctgaa agtccaatct ttgatcaaga gctggtagga 300  
 agtctgagaa tttgtatcag cagtgttctt aggtgtgtct gtctgagtaa ttgggatcag 360  
 agcaacagct gatatcatgc ttaccttgtg ccaggctccc ttctaagggc ttcctggaca 420  
 cctgctcgtg tcagtectca cagcaatcac atgaggtatg ttctgttggt gtctccttgt 480  
 gcggatgaag aactaggca cagagaaaac tggccacagg tgtacagctg gggaggccag 540  
 agccagaatt cagacctggg gtgtcttggc tgatgtgagc tagtgtgggc cagcatggga 600  
 cacagaggga ggattagctg gagaagcagg acagagggca agagagacga gatctccgac 660  
 agtgctgggt cagagacact ttcctgagcc atgattaaac ctgattatgg gacatgtttt 720  
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<210> 30  
 <211> 642  
 <212> DNA  
 <213> Homo sapiens

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 agtaaacagc aagattccac actagctctt aactggccaa gctatatattc tataactaga 180  
 attgctatth gtggatttcc ataagttata ataacacgat aagaccactt tatccatgta 240  
 ttctagtac tttttcttcc tatagcaaaa agaaaaatac atctttcacc atttacaagt 300  
 acaaatttca aggagaaatt taaaaggag agtaacaaac tgtcctgagt tgcagcaaga 360  
 ctctgagag ttccatttcc tgggccctct gctgcctgtt tttggcattg aaccaggaa 420  
 tcttttctaa agcacacaga aatcttgcaa aagaggccat ttctagttag gcttttgtcc 480  
 aactgtctag ttaaataaat taaattctta gattacaaaa tgtgcttcaa aggtttaaca 540

aattgaaatg tccttaagta tttcaaataa attaaggaag aattcccatt cccatagtct 600  
tctactttcc tcttccacac ctatgatgaa tgtcctgaaa ag 642

<210> 31  
<211> 592  
<212> DNA  
<213> Homo sapiens

<400> 31  
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aaaacatatt gaaggtttat gtacttataa aaacctcatc attccctaaa gaaaaaaaaat 120  
ctcaatttgg tttagtgtca ttgtagtctt gctttctaca tcttactaat gtctcattta 180  
tttattcatt ttgctctgtc acatttagaa tgattttgat gggcaaaaat catggtagtt 240  
acaaacagcc ctttaaaact attgttatac tttgttcagt ggattctggt agaggcttta 300  
aggtaattat ttctttaag cattgtgtaa atatacctcc tactgtagtg cccttgggaa 360  
caggcaaaat tcagaactgg cctgctagca gtcttaccag gggtataaaa gtaagattat 420  
tatatataaa acagcattaa ctcaatgcgt ggtgtgttgc agctggcaaa caacctcgct 480  
ccccaagctg ctaaattcgt ggtcttatga atgtctccat tgctgtgttt gctgtaacaa 540  
gaagtgggag ggtgttcccc agtagccttg actgtttacc aatgcacact cc 592

<210> 32  
<211> 485  
<212> DNA  
<213> Homo sapiens

<400> 32  
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gtgggttctct ttgctcctgt ctgccctctt gggcccaata cctagtattg tgcttaggat 120  
tcacaaacgc aacaaatact tactgagcac ctactctgtg ccagggtgctg tgctatatgc 180  
tgagaaaaca atgttaaaca agatggataa ggttttcttc cttatgggtg ccatagtcta 240  
gtggcaaaga caggtaataa tgactcagtg tattctacta aggacaagca tatcgtgcta 300  
agaaaacctg tgtgggaatg ggtcagggaa ggtatccttg gagtagcccc gtttgaactg 360  
ggatctgaag actgagagtt atctaagtgg ggagagcatt gcaggcaggg ggatcagcat 420  
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cccag 485

<210> 33  
 <211> 695  
 <212> DNA  
 <213> Homo sapiens

<400> 33  
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 aatactattg cttgttcact taacaatgat tacttgaaca tagttcagct aaagctttta 180  
 tgatattcac taatctagca tttattttcg cattgctttc caccatcact aaagtaatta 240  
 ctacatgttc accaactaat tattctgatg gtgcattaag aattgatctt taccttaata 300  
 ttttatggta tcaagtgttt ttgcattcat caagaatatt ccattttgct tatattttta 360  
 tgatgagctc tagaatatca tcaactaat atctagcaaa ttataaatat gtcatttttt 420  
 aggtaaaata ttttaagagta tgtagtgcta tatatttagt tatttttaaata caaatactta 480  
 atgtttatac tttttaattg atgtacaatt ttcaattctt tagaatgccc ttatgaaata 540  
 attgccctta ttatagtttt ataacaactt taatatatct tctgtatcta tagcagatga 600  
 tttataaaaa tgcttttctt tattaataac tgtctctatc tcaagttctt catagtgcgc 660  
 tattttttct ttttgatttc ctgtagagat acata 695

<210> 34  
 <211> 655  
 <212> DNA  
 <213> Homo sapiens

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 caaaaataaa cttacctctt ttttttttcc caggatatctg ttactttccc tattttgcaa 180  
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 cccctattgt tacctttgac tggactatta gatgacatct cagttactta ccttttatgt 480  
 gctagaatta atttcctagc tggagttgtc cccatgacct gaagctgagt gcctgctcta 540  
 ccatgcaaga agctctattg ccgaggccta ggctgtttt gggggcttct ctagccaatg 600

tgcaatgtcc cattcctagt tgcatctga aatataacat ctgagttcac agtat 655

<210> 35  
 <211> 506  
 <212> DNA  
 <213> Homo sapiens

<400> 35  
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 aatctgcttt aattatcatc ctatgagaac atttttggac atgcatgaac atacaagtgt 120  
 tctatgtacc cttccacagg aactattaga ggtaagcat cattcagcca aaaatgacta 180  
 gacaaacttc aatgagagga ctgatgtgaa catttaata tataatcaaga tagatctaag 240  
 gttaaaaatt attgagaata aaattggaag aacaatgtat caacgttatg ctattcaaaa 300  
 ctagaaataa tgcatgtaaa caatgggaga agaagggaag gtaaaaaaga caattgtaaa 360  
 agcacgttat tggatagcaa atgtatggga agtaaagtac acacattaaa cttggcaaac 420  
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 gccttaaaac aaatattaaa accttt 506

<210> 36  
 <211> 645  
 <212> DNA  
 <213> Homo sapiens

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 gccttaggta tgtcacaggg ccccttaggc cttttggttg tcgttttcat aaaaggcagc 120  
 ttgtcttgct gctgacaatc atctttgaga gtgttagact taaatgagat cctgcagtag 180  
 ttttcacct ccacaggtag caaaatcttt actctaaaca aattgtactt gattccttga 240  
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 tgtatatattt ttacttttct tggagcccct cagtaagaaa aacaaaacag cttttaatac 360  
 aatgttttca caatggcaaa gttcaaacac agacaaaggt agaggcaatg gtatgataaa 420  
 gccccaggca ttcacacccc agattcaata attaccaatt cataatcaac ccaatttcag 480  
 ctctccacct cacacctcac tttttaaaag acagatcctc cctcattaga ttagttcatt 540  
 cacaaatatt ttatatgatc ttgaaaatat aagtgtcct ttaatcattg tgatatcaaa 600  
 ttcaaaatta acattaattc tcaaataaat agggctattt tgatg 645

<210> 37  
 <211> 563  
 <212> DNA  
 <213> Homo sapiens

<400> 37  
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 tttgttacta ttattgtaaa cagttatctt tcagatcagt taagaaaaat aaaacttaat 180  
 tttaccttaa tatagtactt ttctaagtct cttccttttt tatgcagttc tttttgacat 240  
 ttctcatagg gcaggtcagc tggcaatgaa ttattccagt tttgtttgtc agaaaatatac 300  
 cttatttctt tgaatttgaa ggataatfff gctgaatgca gaataatagt ttggtagctt 360  
 ttttggtgca acacttcatg tattctcctt tctttgtgtt tgcattgggtt ctgaagagaa 420  
 agataatgta attcttatcc tttttcctct atggataagg tgttggcttt tccccctctc 480  
 tagcttcttt caagattttc tcttctcttt ggttttttgc agtttaaata tgatatgcct 540  
 ggggtggagat ttggatttat tat 563

<210> 38  
 <211> 604  
 <212> DNA  
 <213> Homo sapiens

<400> 38  
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 ttaattttcc actgagagtt ggatcctgag ttgaacacag agctccagac aggggctctt 180  
 ggttcactcc atgtgattgg atttcaggga accaaggggc tcctaattgg aaaatagctg 240  
 tgctttcacc ccctatcccc acacacctgt gttaaatgtc ctcagcaagc atcccatagg 300  
 acatgaaatg accgcttggt tcagtcaaaa tgatcaaac agttgagcag gcattcctca 360  
 ggctggactg tgaaaggaaa atggaggtaa gcgagcaatg cctggccaag accattatac 420  
 aaagagactc tatggacagc actctgggtg tggcctttac ggagtgacct actgctctct 480  
 gcctttatcc acaagtcact gggccaactt agaactgtaa tcaaacaatag ttcaacaaaa 540  
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<210> 39



<211> 687  
 <212> DNA  
 <213> Homo sapiens

<400> 39  
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 gttatgcggg catcagggca acatggggag aacagtggca ggcacataag gccaccccca 180  
 ggtacaatgt ccagtgcagt tcacgggtag gtaaattctac tctgtgtccc cacagaccca 240  
 tagactccca gggggcaca agtcaatcag ggctgacct tggtagtgac atgtgttatg 300  
 tttgcaaagg ctgtgacagg taccatccc acagtgggtg taccccaatg ttgctctatg 360  
 cactgtggca cttgggctgg gactactaca tgttccccac tagccagccc catcataaac 420  
 gctatgggcc agccaggggt tgggcacacc atgtgtcttg cagcatcctt tgtccaaagc 480  
 tgccatgttg cattccaggc atcagccatg ggacccccaa gtctccaacc atgtccagtt 540  
 ctctgcagac acaagatgta tgtgccaagg caagccatcc gcagccctgc tgggaaggga 600  
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 atgcaattgg agtatgttaa cctctgg 687

<210> 40  
 <211> 550  
 <212> DNA  
 <213> Homo sapiens

<400> 40  
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 agctttatgt ggaaacatga tgaaaaatgt gatgtattaa tacttactga tactccaaga 120  
 aaaaaataat aaaatattta gaaagctcct cccatcattt cctttggctt tttaactcta 180  
 ccagatcttt gagaatgcat attgttgctg gttaaccaga tgaaccaccc ttctcttact 240  
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 caccatttaa gaaagagaga aaataaaaat gtcatttct aattgtctc atttcagcag 480  
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<210> 41  
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 <212> DNA  
 <213> Homo sapiens

<400> 41  
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 taagtgtcat ccccttagaa ttgggcattg actccgtaga attccccttt gtacaagggtg 540  
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 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

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 <212> DNA  
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gtcaacaacg acac

674

<210> 45

<211> 609

<212> DNA

<213> Homo sapiens

<400> 45

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<210> 46

<211> 522

<212> DNA

<213> Homo sapiens

<400> 46

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 <212> DNA  
 <213> Homo sapiens

<400> 48  
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<210> 49  
 <211> 695  
 <212> DNA  
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 gggttggtag atgagcaggg atgggtcaga gaaatctagg actgttaaag caagcatgac 360  
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<210> 50  
 <211> 586  
 <212> DNA  
 <213> Homo sapiens

<400> 50  
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 cctcttgca cactactcc acatgtaaga cttctacat tttggttggt ttgttcatca 180  
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 <212> DNA  
 <213> Homo sapiens

<400> 51  
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 gaagaagcag aattcaagct gtaactgcct gttggagaga gccaacccctc ggcctctgtc 180  
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<210> 52  
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 <212> DNA  
 <213> Homo sapiens

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<210> 53  
 <211> 584  
 <212> DNA  
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<210> 55  
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<210> 56  
 <211> 585  
 <212> DNA  
 <213> Homo sapiens

<400> 56	
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<210> 57  
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 <212> DNA  
 <213> Homo sapiens

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<213> Homo sapiens

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<212> DNA  
<213> Homo sapiens

<400> 60

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<210> 61  
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 <212> DNA  
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<210> 62  
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 <212> DNA

<213> Homo sapiens

<400> 62

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gaactgtaaa ttcaataccc agcaataata ttcttcaggc actaaagtga catagaaaaac      360
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<210> 63

<211> 550

<212> DNA

<213> Homo sapiens

<400> 63

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cacatcaatg tttccaccaa ggtttttgct tccagtgtgg tagggcaaaa agatgtgaac      180
tgaattattg gtactctcaa attaaatgta ttcattttat taattcattt agcaacagac      240
atacacaggt acatataccc atatccgtag tttcacttat aaagaaaaat taaatccacc      300
caactgtttt gttttctgca atatttttaa cttctgtgac tttttgtttt ttccattgct      360
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aaagtatgca gaaagataaa gaaaatgcat ccactcttag aagtgttac atctacttag      480
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<210> 64

<211> 556

<212> DNA

<213> Homo sapiens

<400> 64

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gcttttctctg ggggtggagga ggaggaggag gaggaggaag accctttgag ctttaaaatg	300
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 <213> Homo sapiens

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ggccagcatc acatagccct gtggtgaatg agagctggca gggtgacagt ctgcgaggaa	180
ggaaggatgg agtccgacc cctttgcttt ctgaaactcc tgctgagaga gttggctcca	240
cagccctggg agggctcggg tagctgctgt ggctgaatca gtcctctgtt atcaccgct	300
cggtgccatg aagtggaaaa gcagtctctg cctcctcgt tctccaata agccatcct	360
aatcaccctt atcatgctcc ttccacacc tgagaaaaaa tggcctcgca gcagacgttt	420
gaagtcaccg ggactggaaa agtctttcaa atggcacctg atttggtac atgcctgcag	480
acaggtgaaa gttagtgcc ccatttcaca ggtgaggcca ctgaggttca gagaagtcaa	540
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<210> 66  
 <211> 549  
 <212> DNA  
 <213> Homo sapiens

<400> 66	
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tctgccccac cggatcatcac tggcacccat gcacacctc agggacctaa ggacaggccc	180
actctgcttg ccaactgtcat tactggtacg caaggactgg cctgcctagt gtctccatcc	240

acagcaaagc attgccacag cccctagttg ttaagccact gaggagctca cagacaccac	300
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cctacaaaag ccaatccaaa aacctaggag aagcaactgt cacaccaa at acacagatac	480
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<210> 67  
 <211> 550  
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ggaacccttt ttttatttta aaatatttaa ttgacaaaaa ttgcgtctgt tcaagggtgcg	180
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ccccagctct gcatgagtgg atggtcagca ttttccaaac ccaactctgaa gactttgcct	480
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ctgatgcata	550

<210> 68  
 <211> 605  
 <212> DNA  
 <213> Homo sapiens

<400> 68	
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atgtgaaaat ttattgtggt aatttagatt ttaattttt ttacataaaa ggacatagaa	180
tagcaaagga aaaacaaaac aaacaaactg aaagacgtaa caagttgaaa aatagatcac	240
agataaagga aacattttat actttgatac acttaataga accttttgct tatattttga	300

actagagccc cacactttca ttttgacta gaccttaca attatataat caaccctgga	360
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tttgaagcta cattagttcc tgtttccagc tgtgagcctg aactccattt taggaagtga	480
gactggccag ggtttctgtg tagagtttgg catttttatt ctctaggacc ctgcaagagt	540
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 <212> DNA  
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<400> 69	
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aactactctg gaaccctgtc ttgtcaacca atgcaggaat cttagttaat gtattccata	180
aacacacgca ggtttccctt aagcacagac tccatgtaag acaagtttca tactttttca	240
ttgtgaaaga tgcaggtagt attggatgga tctgaagagt tggcaaatg acaggaagat	300
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agcatgaaaa atcctttgac tgccttgtgt tatttgcaac agatgaatct aatttgtatt	480
cagacatcag tgctataact aactagagaa ataaaatgga tgtctatgat ctctcttcaa	540
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<210> 70  
 <211> 537  
 <212> DNA  
 <213> Homo sapiens

<400> 70	
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gtctgcttgg atttgaatgg aattgcggtg catccagatc actttgagga aatttgtatc	180
ttaattctat tgaattttcc aacaatagac atgatgtagc tctctgttca gctcttcttt	240

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<210> 71  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

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	tcctcagcta tgaattagaa	taaatttggc actagattat	ggggtattcc cacaggaaag	180
	taccttactg attttccctc	tatccttctt gatacattat	ggttgaaccc actgttatgc	240
	aacacctgct tactttggcc	ttaagggtca tagtgacaaa	agagaaacct ttaaagaagt	300
	catagtaa at gttagggaaa	gggattttca atgcatggat	atatttggca aggtaaacaa	360
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	atattgaaaa gtaaaagcag	ttgaatgggt tcaaagtata	taagaataca aactgattgc	480
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	ttaattttat atacgcaa at	gatcctactt acattcttga	aaataatttg actctttagg	600
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	taattctggg taaaagctat	ttttgagatg acatgaattt	tcaaaatact aaaattttta	840
	aaataatcat ttccacaaac	ttatttaagc tgtgtgtaat	gtatgtaa at actaagtaat	900
	atgttattca attttaggaa	ctttatgtat gttttcatat	c tagtattaga aaataattct	960
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<210> 72  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens



<400> 72  
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agcagcctcc ctggcctcta tccactggat gccagttata cccgctccag ttgtgaccat 180  
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agaagactga aagggcagtg gaggagagtg ggggtgtgtgt ggggggggtgt gggcaggagc 360  
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cctgaggtag gaacaagcat ggaatatcaa tagaatggtg 1000

<210> 73  
<211> 1000  
<212> DNA  
<213> Homo sapiens

<400> 73  
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gctcaaaacc atccacacgc ttcacatccc atttgaaata aaatgccaac tgcttaccat	480
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<210> 74  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

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<210> 75  
<211> 1000  
<212> DNA  
<213> Homo sapiens

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aaaacttttc ctccaatgag tgcattgcttc aaaagggctg 1000

<210> 76  
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<212> DNA  
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caggctgaat ggtcctcagc cctctctttc tatgctggct gaactctgag gcgggaacag	960
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<210> 77  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

<400> 77	
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ttttgtgcat gttttgagcc agctgtttgg gaaggagggc ccagccact gcccttggtg	660

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<210> 78  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

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<210> 79  
 <211> 1000

<212> DNA  
 <213> Homo sapiens

<400> 79  
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<210> 80  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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aactaagtga tggaaaatga ataactaat gtatagggaa agaatccaga aaagaaattt	180
gtattttatt ttttctaagt aacttcaca gatatgtttg agaaaactgt atgatctagt	240
gaatagaata ctcaaaactc taatatacaa gtcacaggta tgggccctag ttacttcact	300
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<210> 82  
<211> 1000  
<212> DNA  
<213> Homo sapiens

<400> 82  
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<210> 83  
<211> 1000  
<212> DNA  
<213> Homo sapiens

<400> 83  
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<210> 84  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

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<210> 85  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

<400> 85	
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<210> 86  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

<400> 86  
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<210> 87  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

<400> 87  
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aaaacattat gagatccaga gtgccccaaa aaaacctgcc cccatatttt aaatcaacca	660
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<210> 88  
 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

<400> 88	
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<210> 89  
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 <212> DNA  
 <213> Homo sapiens

<400> 89	
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<210> 90  
 <211> 1000  
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 <213> Homo sapiens

<400> 90	
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 <211> 1000  
 <212> DNA  
 <213> Homo sapiens

<400> 91	
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<210> 93  
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 <212> DNA  
 <213> Homo sapiens

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<210> 94  
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 <212> DNA  
 <213> Homo sapiens

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aactcttttc tttctttctt tttttttttt tttttttgaa atggagtctt gctctgtcac 360  
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<210> 95  
<211> 662  
<212> DNA  
<213> Homo sapiens

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tcacgatctc gtccttattt taccacgtgc tagaatttgg tgaccaaagt accagaacat 180  
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<211> 644  
<212> DNA  
<213> Homo sapiens

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caatttgttt tccaaataga aattcagaac ttccaatta ctactgttt tagtcaagtt 360  
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<210> 97  
 <211> 582  
 <212> DNA  
 <213> Homo sapiens

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<210> 98  
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 <212> DNA  
 <213> Homo sapiens

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gatctgtctg atgtaggagt ggaaagtggg tggttctttt ctccccatc ataaaggctc	180
acagctgata cccctataaa gaaagactgg ttaacaagag aaaagcacia caaatatatg	240
aatgtgaata agtatgagag ccatacaaaa atatgaaaat tcaaagaaat ggtagacga	300
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<210> 99  
 <211> 541  
 <212> DNA  
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<400> 99  
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 aaaccccata ctacgccagt agacaggact atggttggac attggagaga agcagcttga 180  
 tggtttaaca ccgaagaaaa atccagccag agacggccag aacttccggg gaggggttacg 240  
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<210> 100  
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 <212> DNA  
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cacattcacg 610

<210> 101  
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<212> DNA  
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<400> 101  
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<210> 102  
<211> 677  
<212> DNA  
<213> Homo sapiens

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<211> 428  
<212> DNA  
<213> Homo sapiens

<400> 103  
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<210> 104  
<211> 657  
<212> DNA  
<213> Homo sapiens

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<212> DNA  
<213> Homo sapiens

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<210> 106  
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<212> DNA  
<213> Homo sapiens

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<210> 107  
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<213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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<210> 110  
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 <212> DNA  
 <213> Homo sapiens

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<210> 112  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

<400> 112	
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atctgtcctg acaaaacatg tctcaatttc tttctaaagc agctctattg tcctagcata	180
tgccctacca agttctttaa agggcatttc caaccttagt tctgacaatg aagacacaaa	240
gtaggttagg ttccaaaacc acccttccta gccctccctg tagaaaatac catgttgcac	300
agttacatgt gtccccctgac acaaacgaca ctcatTTTtac gtaggtcact ggacctcaaa	360
ctgttggttg ttgctgtccc agccaattca agagtgaagg aagatgtaac cagacataca	420
tatctccctt tct	433

<210> 113  
 <211> 461  
 <212> DNA  
 <213> Homo sapiens

<400> 113	
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tagctcctat ccccaaactt acaaaaacaa gagttttaca gaatgagtca aatataattt	120
gtttgggcta ctatttcatt ttaccatttt atccctatta gtatttatca ccatacttc	180
aaaggaattc atacatgtag acacatctga ggtgttcctg atttctcctg ttcgacctgt	240
ggtaaaaactc ctgtggcact atagcacctt tagcttatca gtcttctttc cctcacctca	300
tagatcagaa cttatcagcc cccatcctgg tccttctgaa tcttttgtca agtcattgct	360
ttccaatctc tgataaagtg ttgaaaggg accattatgc ctctcagaga tacacacagt	420
catgtgccac ctaactatgt ttcagtcagt gagggacat a	461

<210> 114

<211> 444  
 <212> DNA  
 <213> Homo sapiens

<400> 114  
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 agatctcctc aaacaaggaa ttttttttta atcatggaag tatggcaatg ggcaactaaa 120  
 ccaaaagtct cagtgtcctc ctcatagata gcttcgctca gaaacaggca gcctgggtag 180  
 agagatggaa tgtaaagtct tattaaatgc tcagctgaag tgtcaagtag ggggctttgg 240  
 tgctgtcctt caggatgtaa tatatgtact aaaccagtga ccgaatacta tacagaatca 300  
 gtagtaccta aaatacatgg atttttatac caaggcttag acatagaatc agcacttgta 360  
 actatcaaat ggttgaggaa tttctacttc atttgtccac aattacgctg gattagaagt 420  
 gtttgcaccc ttgcatctgt gtgt 444

<210> 115  
 <211> 473  
 <212> DNA  
 <213> Homo sapiens

<400> 115  
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 ctgtgggatg gtggtgatgt caataccaag aaaagctttg cagagagctt ggggtttcag 120  
 ccaagactcc acaaaggcat aggggctttg tgggagaatg gcagtcctcc tggagaagtg 180  
 gcagataaaa aggtaaagat ctgtgagcaa cgcatctttg agttcaggaa ttgacaatag 240  
 tttggtatta gaagaagagt aagagtgtca aaaggagcat ttgtgtaatc tttcactcca 300  
 gagattttta tctccttaat agaaagtgtt ttgtattgat tgaatgatta acctttatta 360  
 agaattttgt tgtctcaggc actggattag tagctttaca catttcattt aaatctcaca 420  
 ttttgatagc ttctactatg gttattattt tacagaagaa actgaagtta aga 473

<210> 116  
 <211> 261  
 <212> DNA  
 <213> Homo sapiens

<400> 116  
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 ggcgttaata aatgcttatt aagttgacga ctatgccaga aaaagggtga gggattacac 120  
 aaagttttta caaatctca cggttaactct tcagaagcaa aaataaaata ataacattta 180

ataaaagtgc ctgctcaagg cctgcagccc aattccaggt ttgctccaaa tgttgatggc 240  
 cttgagcttt cttgtgtgaa a 261

<210> 117  
 <211> 193  
 <212> DNA  
 <213> Homo sapiens

<400> 117  
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 atgggttgca ggagcaccat gaggttcac tcattcttgc cttcctctgc cagcatgtgt 120  
 gccatctgca atgtctcact gagcactgag tggggcctgc tatgtgggca gtatccctgc 180  
 catcttcata tca 193

<210> 118  
 <211> 364  
 <212> DNA  
 <213> Homo sapiens

<400> 118  
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 aagtctaaat ctagagtgtc tagatgcttt gcaggatatc tggatttaaa tactcttggt 120  
 ctcattgatg tcttatcatc tccactctga aaaatgattt cttttgatgg aacagatagg 180  
 aaaatactgt atagtatta aaaatatggg ttctatagtt aggctacttg agttcaaacc 240  
 ctggctctga cgctttctaa ctgtgtgact gtggacacga tataaacct ctattaattt 300  
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<210> 119  
 <211> 425  
 <212> DNA  
 <213> Homo sapiens

<400> 119  
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 ttgtgagcag acctgtacta caagaaagg taaaagaagt tatttaggta gaaagaaaat 180  
 gatatcaa at aagcagatct acacaaagga atgaagatct tcagaaatcg taaaattgtg 240  
 ggtaaatcta aaagccattt taaaaattt gagtcatctt aagattattg tctatagcaa 300

agaaaaatgc tagcaatttg ttatgaggtt taaaatatgc agaagcagaa gtaaatacata 360  
 taatgatagc aacatgacaa ctgggggaaa atgaaagtcc actgaagaaa tgcttaataa 420  
 atgtt 425

<210> 120  
 <211> 438  
 <212> DNA  
 <213> Homo sapiens

<400> 120  
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 aaggcttcgt caacataaca aggccacctt agctagacag gcctcttcct ttcttcctct 180  
 cataacctgt cttgccacta aacctgaatt accagcacia cctctttggg gccatgctct 240  
 gagccacat tctttctata acctcaagta ggtatataag cttctgcgcc ttattgtctt 300  
 cattctgaag gctcttatgt acatgcatta aacaaatttg tatctcctat taatgtgcct 360  
 tttgcgagtt gatttttcag tgaaacttca gaggtccaac ggcagtagcc cctaccaagt 420  
 tcaagatgct ccacttac 438

<210> 121  
 <211> 482  
 <212> DNA  
 <213> Homo sapiens

<400> 121  
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 gctatctctg tatctagaag atgtcagact catggaagtt ttgtccattt tattcccttt 120  
 gcttatccat tctttcttgt ttacagaaag acttaatttt ctgtctcata tctctgtcct 180  
 tcttgcccca ctatttttcc cccttctcca aaaatcccag ccccaaaaac agtctacata 240  
 ttgtgaaaaa gattttctca accacaaggg tgatgtaact ttaggcctgt gttttctctc 300  
 tcacacacac aaaatatttg atatgagtga gattttaaaa aattggtttt taaatgtgat 360  
 gaaaagagtg tccttttcac cagaacaaaa caacccttaa tgctgaagcc tccttcccga 420  
 tatgggtggc ttccaaatat gaagaaatct gtgcattggg ccacaggctc cagacaaagt 480  
 ct 482

<210> 122  
 <211> 568

<212> DNA  
<213> Homo sapiens

<400> 122  
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acctcacaca gcctgagtgg gcctgagata ggctgagggg cctaagcttc aattgcataa 120  
gcagggctag gtcactccag ttaccaaaga cagaaacaga tagtccagag ccgtccaggg 180  
gatgctagcc actgcccagg agatgatcag agaacacaca acagaaatca gaaaatgtag 240  
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tacagaaatg aaagcttggt ctgtgcc 568

<210> 123  
<211> 413  
<212> DNA  
<213> Homo sapiens

<400> 123  
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gctaaattta aatgagaaaa agagcttggt gcacttggtg atccagttgg atccagtttt 180  
ctctgctggt ccattttttg tatccctttt gagtttgcat tcctttttta catttttttg 240  
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ggttaaattt taatagctaa tgggacaaaag gtatataggg atatataggt acaaccctag 360  
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<210> 124  
<211> 525  
<212> DNA  
<213> Homo sapiens

<400> 124  
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agaggtagga cagcatagtt ggtaaaaata cagaccctgg aggcaaactg cctgggcttg	300
aatcccagct ttattacttt gggaaaacta cttatcttct ttacttgttt tggatatccat	360
gtctgtgaaa tggaagtaat aataatcctc tcatagcatt gttgtgaggt ttcaatagat	420
gaagtgaaga ctttagaagg gcacatgata agaattatat aagggttacc tattattgct	480
atccaatttg tcatagcaag ctaagggacc ttgggcaagt tactc	525

<210> 125  
 <211> 575  
 <212> DNA  
 <213> Homo sapiens

<400> 125	
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taagcattta gtctcatcac aaattctggt ttagaaaaaa acaacagaaa atagtgaatg	180
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ctagaggggtg gtgtggtaca gtgggaggaa tggactttgg agtgagatcc atgttcaa	360
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caccatctcg aagatttggtg gtgacaacac agcatttact tctgctgta tacttcccat	480
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taaaaatcac ccttcgactt tcagttccac aaggc	575

<210> 126  
 <211> 638  
 <212> DNA  
 <213> Homo sapiens

<400> 126	
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gcattttgaa agagctgaat ctatgtccag gttcaagaaa gaatgctgat caactgttgg	600
caatagatgg gtttaataata tcttatgatt ggttcttg	638

<210> 127  
 <211> 573  
 <212> DNA  
 <213> Homo sapiens

<400> 127	
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cggatattctg gctaccatag ctatcttgct ctttttggtt ataattatga tatgttccaa	180
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<210> 128  
 <211> 461  
 <212> DNA  
 <213> Homo sapiens

<400> 128	
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gggcagaggt tcttcctcac tgcccgaatc tgcttcccga cagctccagg gttccctcag	180
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gagtaggaag actagcactg tgagcaggat cgtcacgtac a 461

<210> 129  
<211> 655  
<212> DNA  
<213> Homo sapiens

<400> 129  
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tgagagcaaaa gcaacccatg gatcagacca atagacaaca tgcagccctc atcta 655

<210> 130  
<211> 657  
<212> DNA  
<213> Homo sapiens

<400> 130  
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ttaagatttt accattttca aagtatttgt acgtaacact ttcatatgtt tttgtttcct	540
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<210> 131  
 <211> 566  
 <212> DNA  
 <213> Homo sapiens

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<210> 132  
 <211> 575  
 <212> DNA  
 <213> Homo sapiens

<400> 132	
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agtccttagt ttaaaaaaca acaaaaaact gtatacacat atatataaa aatcaggtag	180
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<210> 133  
 <211> 651  
 <212> DNA  
 <213> Homo sapiens

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<210> 134  
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 <212> DNA  
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<210> 135  
<211> 198  
<212> PRT  
<213> Homo sapiens

<400> 135

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20 25 30  
Ile Lys Leu Ile Gly His Glu Leu Ala Leu Gln Val Glu His Asn Asn  
35 40 45  
Ser Arg Ser Lys Ser Arg Leu Pro Ser Lys Ser Cys Ser Ile Arg Arg  
50 55 60  
Phe Phe Ile Gln Asp Ala Lys Ile Ile Lys His Asn Asn Cys Ile Glu  
65 70 75 80  
Leu Asn Glu Asn Arg Gln Cys Phe Ile Ile Glu Lys Phe Ser Asp His  
85 90 95  
His Ala Lys Ile Phe Leu Ile Phe Asn Phe Leu Cys Arg Ile Ile Phe  
100 105 110  
Met Ser Met Gly Tyr Phe Glu Tyr Arg Arg Ala Met Cys Asn Asn Tyr  
115 120 125  
Ile Arg Val Asn Ile Val Ser Ile Thr Ser Ser Val Tyr His Leu Cys  
130 135 140  
Tyr Lys Gln Ser Ser Tyr Ile Leu Leu Val Ile Leu Asn Cys Thr Thr  
145 150 155 160  
Lys Leu Tyr Leu Gln Ser Pro Cys Cys Ala Ile Tyr Ile Leu Phe Ile  
165 170 175

Phe Phe Leu Thr Ile Phe Cys Thr His Pro Ser Ser Leu Tyr Ser Pro  
180 185 190

Ser Ala Gln Leu Asn Ser  
195

<210> 136

<211> 214

<212> PRT

<213> Homo sapiens

<400> 136

Arg Cys Ser Ile Val Ser Ser Val Ser Cys Pro Leu Leu Pro Pro Gly  
1 5 10 15

Val Asp Ser Cys Thr Val His Pro Thr Pro Ala Phe Pro Ser Phe Leu  
20 25 30

Ile Ser Pro Val Ile Phe Pro Val Ala Leu Leu Cys Trp Cys Pro Val  
35 40 45

Arg Ser Cys Gly His Lys Arg Leu His Gly Pro His Pro Gln Leu Gly  
50 55 60

Glu Ser Ser Pro Ser Trp Val Leu Trp Thr Val Lys Lys Asp Gly His  
65 70 75 80

Val Gly Ser Val Glu His Glu Val Val Gln Asp Leu Gly Gly His Arg  
85 90 95

Ser Cys Leu Pro Ala Ser Arg Ala Leu Pro Pro Phe Gly Ser Leu Leu  
100 105 110

His Leu Gly Lys Arg Phe Val Pro Thr Pro Arg Arg Val Asn Arg Ala  
115 120 125

Pro Trp Trp Ser Thr His Cys Pro Ser Glu Gly Pro Ser Ser Leu Met  
130 135 140

Ser Trp Cys Pro Gly Leu Pro Gly Arg Ile Leu Ala Ala Leu Pro Gly  
145 150 155 160

Pro Glu Met Asn His Trp Glu Glu Ile Gly Asn Glu His Thr Ala Ala  
165 170 175

Thr Leu His Pro Asn Pro Val Pro Tyr His Arg Arg Leu Leu Trp Gln  
180 185 190

Asp Asp Ser Ile Ser Val Cys Leu Arg Ser Leu Phe Leu Pro Arg Leu  
195 200 205

Leu Pro Pro Gly Arg His  
210

<210> 137

<211> 141

<212> PRT  
<213> Homo sapiens

<400> 137

Ile Ile Ser His Thr Ala Phe Phe Arg Phe Ser Leu Ser Ile Cys Phe  
1 5 10 15  
Cys Asn Ser Tyr Trp Thr Phe Thr Ser Leu Ser His Cys Leu Leu Tyr  
20 25 30  
Leu Leu Thr Phe Val Phe Ser Val Ser His Cys Cys Ile Val Ser Tyr  
35 40 45  
Tyr Leu Ala Leu Pro Val Asn Ser Leu Ser Phe Phe Cys Asn Leu Phe  
50 55 60  
Ile Ser Ser Leu Cys Leu Leu Phe Gln Leu Asn Leu Ile Ala Gln Ser  
65 70 75 80  
Phe Ile Trp Ser Phe Lys Ile Cys Phe Cys Leu His Ser Tyr Phe Val  
85 90 95  
Leu Phe Ser Leu Ser Leu Tyr Leu Phe Leu Met Leu Ser Ser Ala Tyr  
100 105 110  
Tyr Phe Asp Ile Tyr Phe Leu Ala Ser Leu Arg Tyr Ser Ile Ile Ser  
115 120 125  
Gly Pro Arg Ile Ile Lys Ser Pro Thr Thr Ser Val Asp  
130 135 140

<210> 138  
<211> 223  
<212> PRT  
<213> Homo sapiens

<400> 138

His Glu Trp Leu Thr Phe Phe Ile Glu Asp Glu Ile Leu Ser Trp Cys  
1 5 10 15  
Ile Tyr Val Pro Cys Tyr Phe Pro Ala Asn His Phe Ser Asn Thr Ala  
20 25 30  
Gln Leu Tyr Ser Asp Thr Val Asp Thr Val Phe Gln Ala Leu Tyr Phe  
35 40 45  
Gln Phe Ile Cys Gly Ile Leu Asp Ser Phe Gly Ser Ser Thr Glu Val  
50 55 60  
Thr Phe Ile Tyr Arg His Phe Arg Gly Ile His Thr Thr Ser Tyr Asn  
65 70 75 80  
Cys Thr Ala Ile Ala Cys His Cys His Val Phe Ile Asn Phe Gln Phe  
85 90 95

Leu Glu Asp Phe Ser Ile Ile Ile Tyr Lys Leu Val Lys Phe Thr Val  
 100 105 110  
 Ile Cys Gln His Leu Glu Gln Glu Lys Met Ser Ala Lys Asp Gly Arg  
 115 120 125  
 Thr Leu Tyr Phe Ile Leu Ile Ala Gly Phe Leu Pro Asp Asp Asn Phe  
 130 135 140  
 Gln Lys Ile Asn Pro Asn Phe Asn Thr Ser Cys His His Phe Thr His  
 145 150 155 160  
 Ser Asn Ile Lys Ile Ser Asn Phe Thr Tyr Ile Ser Ser Glu Ser Thr  
 165 170 175  
 Asp Lys Leu Phe Tyr Ile Glu Gly Asn Ile Ser Trp Glu Val His Asn  
 180 185 190  
 Cys Thr Cys Arg Ile Ile His Arg Ser Phe Gln Val Leu Leu Gln  
 195 200 205  
 Ile Gly Leu Lys Ser Ile Thr Val Gly Leu Ser Val Ala Gln Lys  
 210 215 220  
 <210> 139  
 <211> 173  
 <212> PRT  
 <213> Homo sapiens  
 <400> 139  
 Asn Ile Ile Thr Phe Phe Tyr Glu Tyr Ser Trp Ser Phe Gln Asn Lys  
 1 5 10 15  
 Thr Ser Tyr Trp Phe Asn Lys Leu Trp Tyr Asn Gln Ile Met Lys Leu  
 20 25 30  
 Tyr Ala Phe Val Lys Val Thr Phe Gln Lys Asn Ile Leu His Arg Ile  
 35 40 45  
 Thr Asp Pro Ser Ala Leu Pro Thr Leu Trp Ala Leu Ser Leu Phe His  
 50 55 60  
 His His Tyr Leu His His Cys Leu Gln Val Phe Tyr Thr Ala Arg Val  
 65 70 75 80  
 Gly Leu Cys Leu Leu Asn Ser Gln Val Lys Arg Gly Arg Lys Leu Thr  
 85 90 95  
 Pro Ser Gly Gly Ser Leu Gly Met Ile His Gly Arg Trp Ser Ile Asn  
 100 105 110  
 Thr Ser Ala Leu Phe Pro Leu Glu Ile Leu Arg Asn Gly Phe Tyr Ile  
 115 120 125  
 Val Ser Gln Ser Phe Leu Lys Val Leu Asn Phe Asn His Pro Gln Gly  
 130 135 140

Val Val Gly Phe Ile Ile Val Tyr Ile Pro Leu Trp Leu Pro Phe Leu  
 145 150 155 160

Leu Val Ser Leu Leu His Ser Lys Leu Gly Phe Ile Ser  
 165 170

<210> 140  
 <211> 223  
 <212> PRT  
 <213> Homo sapiens

<400> 140

Val Phe Leu Ser Arg Lys Glu Glu Lys Gly Trp Val Val Thr Gly Gly  
 1 5 10 15

Gln Gln Cys Gln Asn Trp Gly Val Trp Thr Gly Ile Gln Glu Asn Glu  
 20 25 30

Gly Ala Gln Asp Glu Gln Lys Gly Gly Glu Ala Ile Phe Ile Lys His  
 35 40 45

Leu Leu Cys Ala Ser Gln Ala Arg Leu Gln Ile Ile Thr Leu Leu Lys  
 50 55 60

Ser Ser Gln Gln Pro Ser Asn Arg Tyr Leu Ser Leu Ile Pro Tyr Pro  
 65 70 75 80

Cys Ser Ala Ser Pro Pro Ile Thr Met Ala Glu Glu Phe Lys Pro Leu  
 85 90 95

Ser Lys Ala Ser Thr Val Ile Cys Pro Leu Asp Pro Ile Pro Ser Ile  
 100 105 110

Phe Leu Phe Ile Glu Thr Phe Ser Met Val Phe Lys His Thr Leu Leu  
 115 120 125

Ser Leu Leu Leu Asn Arg Gln Met Gln Leu Ile Lys Leu Phe Phe Ser  
 130 135 140

Leu Gly Tyr Cys Pro Ile Ser Leu Leu Pro Phe Met Ala Glu Leu Leu  
 145 150 155 160

Glu Arg Val Phe His Asn His Phe Ile Ser Thr Pro Leu Thr Asp Phe  
 165 170 175

Thr Gln Leu Glu Glu Glu Glu Gly Thr Leu Ile Pro Lys Cys Pro Ile  
 180 185 190

Lys Pro Asn Pro Leu Lys Val Leu Cys Cys His Asp Gly Cys Glu His  
 195 200 205

Gly Glu Lys Ile Leu Glu Asp Val Gly Asn His Asp Arg Glu Thr  
 210 215 220

<210> 141

<211> 176  
 <212> PRT  
 <213> Homo sapiens

<400> 141

Ser	Cys	Glu	Thr	Ser	Ile	Leu	Val	Ser	Trp	Gly	Gln	Gly	Asn	Gln	Gly
1				5					10					15	
Pro	Ser	Met	Leu	Ile	Leu	Pro	Cys	Val	Arg	Leu	Ile	Leu	Ser	Ile	Ser
			20					25					30		
Gly	Gly	Gln	Val	Ala	Thr	Trp	Pro	Pro	Gly	His	Thr	His	Gln	Glu	Phe
		35					40					45			
Ile	Leu	Cys	Asn	Leu	Glu	Glu	Gly	Leu	Arg	Asn	Ala	Gly	Gly	Tyr	Leu
	50					55					60				
Pro	Gly	Asp	Ile	Leu	Tyr	Pro	Leu	Ile	Gly	Asn	Trp	Gly	Arg	Ser	Gln
65				70						75					80
Phe	Gly	His	Thr	Phe	Pro	Glu	Leu	Asn	Phe	Tyr	Glu	Gly	Asp	Leu	Gly
				85					90					95	
Gly	Arg	Gly	Ser	Glu	Ala	Asn	Ile	Ala	His	Val	Pro	Gln	Thr	Leu	Val
			100					105					110		
Cys	Leu	Thr	Glu	Ile	Tyr	Ile	Phe	Ser	Asp	Lys	Phe	Phe	Lys	Ser	Leu
		115					120					125			
Leu	Tyr	Val	Phe	Arg	Thr	Ile	Ser	Gly	Asp	Phe	Leu	Lys	Asn	Asn	Phe
	130					135					140				
Cys	Leu	Leu	Tyr	Leu	Phe	Ser	Ala	Val	Thr	Gly	Pro	Gln	Ser	Pro	Tyr
145				150						155					160
Asn	Val	Asn	Pro	Glu	Val	Glu	Leu	Leu	His	Tyr	Ser	Phe	Phe	Phe	Phe
				165					170					175	

<210> 142  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 142

Ser	Gln	Lys	Asn	Thr	Thr	Pro	Leu	Leu	Glu	His	Asn	Val	Ile	His	Phe
1				5					10					15	
His	Leu	Leu	Ala	Ser	Leu	Ala	Glu	Phe	Gln	Lys	Cys	Asn	His	Tyr	Glu
			20					25					30		
Ala	Gly	Thr	Lys	Asp	Phe	Pro	Asn	His	Phe	Val	Ile	Leu	Ile	Asn	Ile
		35					40					45			
Ser	Ser	Ile	Leu	Leu	Asp	Pro	Phe	Thr	His	Phe	Leu	Tyr	Cys	Phe	Pro
	50					55					60				



Phe Pro Glu Val Leu Asn Lys Ile Ser Leu Leu Phe Val Leu Glu Lys  
 65 70 75 80  
 Ser Ser Cys Leu Pro His Arg Met Val Val Gly Glu Thr Gln Trp Glu  
 85 90 95  
 Thr Ser Val Lys Gly Gln Lys Thr Leu Thr Phe Val Ile Val Ser Ser  
 100 105 110  
 Phe Phe Gln Asn Thr Ser Ile Ala Trp Leu Leu Tyr Thr Arg Leu Leu  
 115 120 125  
 Lys Ile Tyr Leu Cys Pro Thr Thr Leu Phe Val Val Asn Ile Phe Leu  
 130 135 140  
 Ile Leu Ile Gln Tyr Ile Ser Glu Ile Phe Asp Leu Gln Ser Asn Leu  
 145 150 155 160  
 Ser Ile Thr Met Ile Pro Tyr Leu Asn Thr Gly Met Val Lys Met Arg  
 165 170 175  
 Thr Asn Leu Pro Phe Leu Cys Ser Tyr Arg Gln Ala Ile Leu Ile Thr  
 180 185 190  
 Asn Val Gln Ser Lys Pro Met His Glu Cys Arg Met Gln Leu Lys Ser  
 195 200 205

Arg

<210> 143  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 143

Ser Phe Pro Val Ser Glu Lys Ile Lys Pro Cys His Ser Lys His Val  
 1 5 10 15  
 Leu Pro Lys Phe Lys Lys His Val Asn Leu Leu Val Lys Leu Tyr Val  
 20 25 30  
 Leu Val Asp Phe Glu Ile Leu Cys Asn His Leu Lys Leu Ala Ser Gly  
 35 40 45  
 Pro Gln Leu Asp Gln Ile Pro Val Ser Leu Phe Leu Thr Ser Leu Cys  
 50 55 60  
 Trp Thr Thr Tyr Leu Gln Arg Gln Lys Lys Asp Lys Ser Asn Asn Pro  
 65 70 75 80  
 Thr Val Ile Leu His Lys Ser Met Thr Lys Leu Pro Leu Gln Lys Leu  
 85 90 95  
 Asn Ser Ser Ser Leu Asn Phe Leu Thr Ile Thr Trp Lys Ser Ala Thr

100	105	110
Met Val Asn Cys Gln Thr Cys Thr Ala Ser Gln Pro Thr Leu Tyr Thr		
115	120	125
Asn Lys Gly Gly Leu Tyr Ser Asp His Tyr Trp Asn Lys Leu Ser Leu		
130	135	140
Pro Asn Val Ser Ser His Pro Leu Asn Tyr Leu Leu Leu Leu Tyr Phe		
145	150	155
Tyr Thr Ala Ile Lys Leu Lys Leu Leu Lys His Asn Phe Ala His Val		
165	170	175
Gln Asn Phe Tyr Ser Val Pro Gln Gln Ser Leu Thr Asn Pro Gln Asn		
180	185	190
Leu Pro Thr Asn Leu Phe Leu Thr		
195	200	
<210> 144		
<211> 170		
<212> PRT		
<213> Homo sapiens		
<400> 144		
Val Ile Pro Ser Ser Val Cys Pro Thr Val Gly Leu Pro Asp Thr Asp		
1	5	10
Ser Thr Thr Leu Val Ile Cys Asp Phe Leu Phe Thr Gly His Glu Lys		
20	25	30
Pro Phe Thr Asp Trp Leu Gln Cys Ala Ser Leu Pro Tyr Gln Leu Leu		
35	40	45
Phe His Thr Asn Ser His Leu Val Asn Trp Val Pro Cys Ser Ala Lys		
50	55	60
Met Cys Phe Ser Ala Gln Val Ile Leu Tyr Thr Pro Ile Leu Asn Leu		
65	70	75
Leu Cys Ala Ser Gln Ser Thr Ile Phe Gln Ser Gln Leu Lys Pro Phe		
85	90	95
Ile Ile Gln Tyr Gly Phe Ser Pro Gln Ser His Val Lys Val Ser Pro		
100	105	110
Cys Phe Phe Gln Thr Val Val Ala Leu Thr Gly Leu Leu Leu Gly Tyr		
115	120	125
Lys Leu Thr Leu Tyr Phe Ser Ile Phe Ser Leu Pro Trp Ser Lys Arg		
130	135	140
Lys Ile Arg Ser Met Asn Leu Arg Thr Tyr Lys Leu Leu Val Glu Gln		
145	150	155
		160

Gly Leu Asp Ile Val Cys Ile Asp Ser Arg  
165 170

<210> 145  
<211> 214  
<212> PRT  
<213> Homo sapiens

<400> 145

Met Gly Thr Ala Leu Phe Lys Val His Phe Pro Asp Ser Ala Val Leu  
1 5 10 15

Phe Ser Ser Ser Ile Pro Thr Asn Ser Gly Leu Gln Ala Phe Pro Leu  
20 25 30

Leu Ser His Ser Ile Leu Pro Glu Pro Ser Ile Lys Ala Pro Thr Ile  
35 40 45

Leu Pro Ser Gly Gly Ala Ile Phe Leu Ser Phe Pro Glu Arg Trp Asp  
50 55 60

Pro Leu His Phe Thr His Leu Ser Pro Arg Pro Ser Thr Cys Leu Ala  
65 70 75 80

Gln His Ser Asn Ile Asn Pro Val Glu Ile Asn Cys Gly Ile Ala Trp  
85 90 95

Phe Pro Trp Met Val Ile Gln Val Val His Cys Thr Thr Met Cys Asn  
100 105 110

Ile Pro Gly Lys Arg Gln Lys Phe Ile Asp Trp Leu Gly Val Leu Asn  
115 120 125

Ser Gln Gly Lys Leu Phe Asp His Cys Met Pro Ser Thr Trp Glu Asn  
130 135 140

His Ile Pro Gln Leu Leu Arg Pro Tyr Cys Met Val Thr Trp Gly Asn  
145 150 155 160

Ile His Thr Val Ser Pro Ala Leu Ser Ala His Lys Gly Asp Ile Val  
165 170 175

Gln Arg Gly Asn Leu Ser Leu Pro Ser Thr Ser Leu Phe Leu Thr Pro  
180 185 190

Lys Ser Leu Ser Leu Leu Thr Lys Asp Ile Ser Ala Ser Ala Ile Leu  
195 200 205

Phe Ala Glu Trp Arg Ile  
210

<210> 146  
<211> 200  
<212> PRT  
<213> Homo sapiens

<400> 146

Arg Ile Ser Gln Lys Cys Cys Val Leu Leu His Pro Leu Trp Gln Leu  
1 5 10 15

Phe Val Tyr Leu Ser His Ala Gly Glu Val Asn Thr Asp Pro Leu Val  
20 25 30

Lys Met Met Ser Asp Ile Phe Phe Ser Ala Ala Asn Leu Ser Ile Phe  
35 40 45

Ser Phe Val Ile Met Gly Ile Leu Trp Lys Val Thr Trp Arg Leu Cys  
50 55 60

Lys Ile Tyr Ser Ser Gln Phe Tyr Leu Pro Val Leu Ala Ser Ile Asp  
65 70 75 80

Val Ser Cys Leu Ser Leu Leu Ala Gln Phe Ala Lys Cys His Tyr Leu  
85 90 95

Pro Phe Ser Ser Met Arg Cys Met Tyr Val Tyr Met Tyr Ile Cys Ile  
100 105 110

Asp Ile Ser Val Tyr Leu Glu Thr Tyr Ile Asp Glu Leu Ser Ile Thr  
115 120 125

Met Ile Ile Tyr Phe Asp Val Gln Val Val Pro Asp Leu Thr Ser Asp  
130 135 140

Ser Phe Leu Asn Leu Met Tyr Gln Asp Val His Lys His Val Phe Phe  
145 150 155 160

Pro Cys Pro Asn His Pro Gly Val Gly His Leu Ser Lys Met Ser Cys  
165 170 175

Phe Cys Leu Leu Arg Trp Arg Ser Gly Ile Gln Lys Ser Arg Ser Val  
180 185 190

Cys Leu Val Cys Phe Ile Ala Ile  
195 200

<210> 147

<211> 191

<212> PRT

<213> Homo sapiens

<400> 147

Tyr Leu Ile Leu Lys Tyr Ile Ile Met Lys Ser Ile Asn Val Ser Arg  
1 5 10 15

Gln Arg Ser Tyr Ile Pro Lys Ile Gly Asn Asn Cys Val His Met Cys  
20 25 30

Tyr His Thr Ile His Pro Ile Leu Leu Tyr Leu Asn Phe Pro Lys Gln  
35 40 45

Pro Val Val Lys Gln Leu Val Met Arg Thr Asn Glu Lys Leu Pro Glu  
 50 55 60  
 Ile Ser Asp Ser Ser Cys Thr Tyr Phe Thr Pro Glu Val Trp Glu Phe  
 65 70 75 80  
 Thr Glu His Asn Val Arg Phe Phe Ser Ile Ser Tyr Pro Leu Pro Lys  
 85 90 95  
 Ile Val His Lys Ile Gln Asn Ile Ser Ser Leu Thr Phe Leu Glu Cys  
 100 105 110  
 Asn His Thr Leu Asp Asn Tyr Phe Arg Leu Leu Asn Gly Lys Arg Thr  
 115 120 125  
 Gly Arg Arg Val Lys Val Thr Cys Phe His Leu Ser Tyr Phe Arg Leu  
 130 135 140  
 Thr Ser Lys Ser Phe Phe Thr Leu Phe Leu Ile Leu His Arg Pro Phe  
 145 150 155 160  
 Leu Val Lys Ser Ala Asp Ser Lys Tyr Lys Ala Asn Ala Tyr Ser Tyr  
 165 170 175  
 Val Ile Phe Met Phe Phe Lys Asn Asn Met Val Leu Thr Ser Ser  
 180 185 190

<210> 148  
 <211> 193  
 <212> PRT  
 <213> Homo sapiens

<400> 148

Gly Leu Ser Glu Gly Glu Ala Ser Leu His Leu Asp Phe Phe Leu Lys  
 1 5 10 15  
 Ile Thr Thr Ile Met Asn Thr Ala Ala Thr Ser Leu Leu Cys Thr Arg  
 20 25 30  
 Gly Ile Ile Leu Gly Val Ser Val Tyr Ala Tyr Pro Glu Ile Ser Ser  
 35 40 45  
 Phe Leu Leu Arg Gly Glu Val Leu His Ile Asp Phe Ile Val Arg Asn  
 50 55 60  
 Gly Lys Ile Phe Asn Lys Cys Ile Arg Ala Thr Thr Phe Ser Ala Leu  
 65 70 75 80  
 Gln Pro Ala Ser Pro Pro Ser Arg Gln Asp Ile Met Asn Pro Leu Phe  
 85 90 95  
 Gly Lys Ala Ala Glu Lys His Val Leu Gln Thr Tyr Tyr His Leu Val  
 100 105 110  
 Asn Asn Ser Gln Trp Thr Asp Gln Asn Ser Arg Arg Phe Pro Leu Ser  
 115 120 125

Leu His Cys Thr Asp Ala Ala Thr His Ala His Ile Pro Leu Asn Leu  
 130 135 140

Pro Val Thr Thr Ala Gln Arg Gln Leu Ser Ser Trp Ala Gln Asn His  
 145 150 155 160

Trp Gly Thr Phe Trp Gln Leu Ala Asn His Cys Ala Gln Arg Gln Ser  
 165 170 175

Gln Phe Thr Leu Pro Gln Arg Gly Thr Glu Tyr Thr Ala His Pro His  
 180 185 190

Leu

<210> 149

<211> 195

<212> PRT

<213> Homo sapiens

<400> 149

Ile Leu Asp Ser Phe Arg Asp Phe Leu Glu Gln Gly Gln Glu Ser Phe  
 1 5 10 15

Leu Asp Lys Val Arg Ser Asp Leu Ser Gln Gly Arg Ser Ile Phe Ser  
 20 25 30

Tyr Thr Arg Arg Asn Phe His His Lys Gln Cys Pro Lys Asp Ala Cys  
 35 40 45

Tyr His Phe Tyr Ser Met Leu Phe Ser Val Phe Trp Pro Ile Leu Leu  
 50 55 60

Glu Ile Gln Val Arg Lys Met Thr Lys Gly Ile His Glu Thr Arg Ser  
 65 70 75 80

Leu Phe Arg Arg Trp Tyr Asp Cys Leu Ser Arg Lys Lys Glu Met Thr  
 85 90 95

Pro Ser Phe Trp Glu Phe Thr Asn Ser Gly Trp Val Leu Asp Lys His  
 100 105 110

Leu Lys Asn Gln Ser Phe Pro Cys Val Ala Ala Ile Thr Ile Lys Met  
 115 120 125

Glu Met Arg Ser Gly Ala Val Asn Ile Gln Gln Glu Leu Leu Ile Cys  
 130 135 140

Arg Pro Asp Lys Ser Pro Pro Glu Trp Thr Pro Ala Arg Glu Gly Arg  
 145 150 155 160

Ser Leu Glu Gly Arg Arg Glu Asp Thr Glu Asp Leu Pro Leu Pro Gln  
 165 170 175

Glu Ala Pro Arg Glu Arg Ala Thr Thr Val Tyr Ser Ser Arg Leu Trp

	180	185	190
Gly Asp Ser			
195			
<210>	150		
<211>	168		
<212>	PRT		
<213>	Homo sapiens		
<400>	150		
Leu Lys Ser Ser Gln Gln Pro Ser Asn Arg Tyr Leu Ser Leu Ile Pro			
1	5	10	15
Tyr Pro Cys Ser Ala Ser Pro Pro Ile Thr Met Ala Glu Glu Phe Lys			
	20	25	30
Pro Leu Ser Lys Ala Ser Thr Val Ile Cys Pro Leu Asp Pro Ile Pro			
	35	40	45
Ser Ile Phe Leu Phe Ile Glu Thr Phe Ser Met Val Phe Lys His Thr			
	50	55	60
Leu Leu Ser Leu Leu Leu Asn Arg Gln Met Gln Leu Ile Lys Leu Phe			
65	70	75	80
Phe Ser Leu Gly Tyr Cys Pro Ile Ser Leu Leu Pro Phe Met Ala Glu			
	85	90	95
Leu Leu Glu Arg Val Phe His Asn His Phe Ile Ser Thr Pro Leu Thr			
	100	105	110
Asp Phe Thr Gln Leu Glu Glu Glu Gly Thr Leu Ile Pro Lys Cys			
	115	120	125
Pro Ile Lys Pro Asn Pro Leu Lys Val Leu Cys Cys His Asp Gly Cys			
	130	135	140
Glu His Gly Glu Lys Ile Leu Glu Asp Val Gly Asn His Asp Arg Glu			
145	150	155	160
Thr Glu Lys Val Val Lys Gly Phe			
	165		
<210>	151		
<211>	121		
<212>	PRT		
<213>	Homo sapiens		
<400>	151		
Thr Gly His Pro Arg Leu Pro Pro Thr Leu Lys Gln Pro Ala Arg Gln			
1	5	10	15
Cys Val Thr Tyr Gly Phe Asn Ser Asp Glu Glu Asp Ser Ser Trp His			
	20	25	30

Gly Leu Leu Arg Thr Leu Asn His Lys Val Ser Arg Asp Arg Arg Thr  
           35                          40                          45  
 Val Pro Thr Ala Ala Thr Pro Arg Trp Val Cys Ser Pro Val Ala Thr  
           50                          55                          60  
 Leu Lys Phe Leu Lys Thr Phe Tyr Gly Val Leu Leu Cys His Leu Gly  
 65                          70                          75                          80  
 Trp Ser Ala Val Thr Cys Leu Ile Pro His Leu Ala Glu Thr His Arg  
                           85                          90                          95  
 Arg Ser Leu Val Arg Thr Arg Glu Gly Ala Gly His Ser Gly Ser Cys  
                           100                          105                          110  
 Gln His Phe Gly Arg Leu Arg Gln Glu  
           115                          120  
 <210> 152  
 <211> 211  
 <212> PRT  
 <213> Homo sapiens  
 <400> 152  
 Leu Val Ala Ile Ser Leu Lys Phe Phe Phe Cys Arg Lys Ile Ser His  
 1                          5                          10                          15  
 Arg Trp Leu Ile Ile Cys His Ile Lys Pro Leu Arg Lys Lys Gly Trp  
           20                          25                          30  
 Gln Met Leu Leu Leu Val Arg Leu Leu Cys Tyr Glu Ile Trp Val Lys  
           35                          40                          45  
 Cys Ala Gly Val Thr Glu Glu Gly Glu Phe Leu Ser Pro Ser Arg Ile  
           50                          55                          60  
 Glu Glu Asn Gly Val Arg Asp Arg Glu Gln Leu Ala Arg Lys Ala Gln  
 65                          70                          75                          80  
 Gly Val Asn Leu Thr Arg Lys Phe Lys Gln Trp Leu Leu Leu Tyr Ser  
                           85                          90                          95  
 Leu Phe Val Gln Ile Leu Lys Met Lys Leu Phe Ile Lys Phe Ile Val  
           100                          105                          110  
 Val Phe Leu Asn Ser Met Arg Asn Gly Arg Asn Leu Arg Tyr Cys Ser  
           115                          120                          125  
 Lys Gly Ser Ser Ala Pro Asn Leu Phe Leu Thr Lys Phe Ile Leu Leu  
           130                          135                          140  
 Pro Lys Val Ser Pro Asn Val Thr Pro Thr Ser Ile Arg Gln Glu Tyr  
 145                          150                          155                          160  
 Cys Asn Glu Ala Met Thr Ile His Asn Leu Leu Ser Ile Lys Gln Val



	165	170	175
His Glu Arg Phe Cys Asn Asn Thr Leu Cys Lys Ser Leu Trp Asn Asn			
	180	185	190
Asn Lys Ile Asp Val His Phe Met Tyr Tyr Cys Ile Leu His Ile Leu			
	195	200	205
Arg His Glu			
	210		
<210>	153		
<211>	173		
<212>	PRT		
<213>	Homo sapiens		
<400>	153		
Val Asp His Trp Ile His Leu Asp Met Phe Lys Met Phe Thr Tyr Gly			
1	5	10	15
Val Leu Ile Leu Leu Gly Pro Glu Asn Ala Tyr Ser Gly Ile Leu Leu			
	20	25	30
Ser Ser Gly Lys Arg Ala Pro Phe Ser Pro Asn Leu Lys Asp His Glu			
	35	40	45
Asn His Leu Lys Cys Leu Leu Glu Val Arg Ile Pro Gln Pro Val Trp			
	50	55	60
Gly Pro Ala Ile Cys Ile Phe Lys Glu Thr Trp Thr Val Thr Cys Glu			
65	70	75	80
Lys Pro Tyr Ala Gln Tyr Val Leu Ala Ile Arg Ile Thr Met Val Asn			
	85	90	95
Ile Asn Tyr Leu Phe Arg Glu His Lys Phe Leu Leu Thr Gln Leu Asn			
	100	105	110
Ala Lys Cys Phe Lys Ser Lys Thr Pro Cys Leu Lys Asn Ile Gly Phe			
	115	120	125
Phe Phe Lys Gln Tyr Lys Thr Gly Tyr Leu Ser His Glu Phe Gly Ala			
	130	135	140
Pro Asn Ser His Cys Phe Gln Thr Ile Ser Gln Glu Arg Ser Leu Gln			
145	150	155	160
Ser Pro Pro Val Ala Ser Ile Ala Leu Cys Val Leu Lys			
	165	170	
<210>	154		
<211>	172		
<212>	PRT		
<213>	Homo sapiens		
<400>	154		

Gln Ile Leu Gly Ser Lys Arg Arg Lys Met Ser Arg Met Lys Arg Tyr  
 1 5 10 15  
 Leu Ile Ile Ser Ser Ala Asp Phe Leu Gly Asn Val Phe Ile Pro Ile  
 20 25 30  
 Phe Ile Thr Tyr Val Val Lys Asp Ser Phe Ser Gly Leu Tyr Ile Gln  
 35 40 45  
 Leu Phe Glu Tyr Ile Tyr Asn Asn Ile Tyr Ser Cys Leu Ile Gly Asn  
 50 55 60  
 Phe Asn Asn Tyr Gln Asn His Lys Glu Ile Phe Phe Ala Cys Phe His  
 65 70 75 80  
 Tyr Phe His His Phe Gly Ile Cys Tyr Val Val Lys Lys Tyr Ser Glu  
 85 90 95  
 Lys Thr Ile Ile Leu Lys Ser Cys Cys Ile Asn Arg Ile Trp Gly Lys  
 100 105 110  
 Glu Gln Thr Thr Lys Arg Gly Arg Leu Met Ser Leu Val Gly Thr Trp  
 115 120 125  
 Glu Val Thr Leu Ile Ser His Phe Leu Asn Leu Lys Glu Glu Lys Val  
 130 135 140  
 Lys Leu Ile Asn His Ser Thr Gln Lys Asn Thr Phe Trp Thr Ile Lys  
 145 150 155 160  
 Asp Ser Ala Ile Tyr Met Asp Tyr Ile Phe Ile Ser  
 165 170

<210> 155  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<400> 155

Arg Cys Glu Pro Leu Pro Gly Leu Glu Leu Leu Leu Asp Cys Ile Pro  
 1 5 10 15  
 Arg Gly Asn Phe Met Thr Glu Phe Arg Ser Ala His Ile Leu Ala Ala  
 20 25 30  
 Ser Lys Arg Glu Arg Glu Ser Pro Ala Leu Ile Ser Val Ile Phe Leu  
 35 40 45  
 Phe Asp Leu Ile Tyr Ser Ile Asn Thr Pro Gln Glu Gly Thr Phe Pro  
 50 55 60  
 Ser Pro Ala Pro Lys Gln Asn Arg Ser Ile Leu Asp Gly Leu Pro Asn  
 65 70 75 80  
 Trp Cys Leu Gln Thr Ser Ser Leu Ser Pro Ser Pro Thr Leu Lys Ser

	85		90		95
Arg Ser Leu	Ile Cys Met Gly Cys	Ile Ser Thr Leu Met	Leu Pro Gly		
	100	105	110		
Phe Trp Leu	Gly Leu Pro Asn Gly	Arg His His Trp Arg	Arg Met Glu		
	115	120	125		
Val Gly Gly	Gly Arg Trp Glu Gly	Arg Gly Trp Gly	Ile Val Pro Leu		
	130	135	140		
Ala Pro Phe	Leu Cys Ser Phe Gly	Ser Leu Gln His	Pro Val Thr Leu		
145	150	155	160		
Ser Leu Ser	His Gln Val Phe Ile	Phe Cys Trp Phe	Pro Phe Val Leu		
	165	170	175		
Pro Thr Phe	Thr Thr Cys Pro Phe	Leu Lys Asp Pro	Ser Ile Ala Leu		
	180	185	190		
Phe Gly Asn	Ile Leu Phe Ser Ala	Gly Thr Pro Glu	Leu Tyr Arg Arg		
	195	200	205		
Val Gln Glu	Ala Thr Lys Leu Gln	Met Pro Thr Thr	Trp Trp Asn Arg		
	210	215	220		
Cys Pro Leu	Glu Ala Ala Ala				
225	230				
<210>	156				
<211>	160				
<212>	PRT				
<213>	Homo sapiens				
<400>	156				
Pro Ile Cys	Leu Asn Ala Ser Cys	Ser Gly Gly Leu Thr	Pro Ile Asn		
1	5	10	15		
Pro Ser Cys	Leu Trp Lys Gly Leu	Pro Thr Glu Leu Asp	Ser Asn Ile		
	20	25	30		
Gln Ser Ser	Ser Thr His Pro Phe	Ser Trp Thr Leu Trp	Gly Pro Arg		
	35	40	45		
Gln Gln Thr	Ser Cys Leu Phe Tyr	Arg Ala Ala Leu Gln	Met Ala Gly		
	50	55	60		
Ala Thr Val	Phe Ser Ala Leu Glu	Asp Leu Ser Met	Val Val Ser Phe		
65	70	75	80		
His Ile Ser	Tyr Asp Phe Tyr Ser	Gln Glu Ser Leu Ile	Cys Leu Leu		
	85	90	95		
Met His Phe	His Leu Ser Val Thr	Leu Leu Gln Asn	Gln Arg Glu Ile		
	100	105	110		

Thr Leu Ile Phe Leu Arg Ala Ser Lys Leu Pro Gly Leu Gln Arg Pro  
 115 120 125  
 Cys Arg Ala His Arg Gln Arg Met Thr Arg Gly His Met Pro Cys Met  
 130 135 140  
 His Phe His Leu Ser Val Thr Leu Leu Gln Ala Asn Leu Lys Gly Met  
 145 150 155 160  
 <210> 157  
 <211> 225  
 <212> PRT  
 <213> Homo sapiens  
 <400> 157  
 Val Pro Leu Val Asn Pro Glu Tyr Asn Ile Phe Tyr Lys Thr Cys Phe  
 1 5 10 15  
 Ile Leu Ser Gly Met Arg Cys Ile Phe Glu Gly Leu Leu Lys Leu Ala  
 20 25 30  
 Ile Thr Ile Arg Leu Leu Leu Asn Leu Gly Ile Ser Leu Pro Ser Cys  
 35 40 45  
 Gln Gly Leu Tyr Leu Met Phe Val Ser Leu Lys Lys Lys Arg Asn Gln  
 50 55 60  
 Thr Asp Tyr Thr Leu Leu Lys Thr Glu Asp Met Tyr Phe Asn Met Ser  
 65 70 75 80  
 Leu Leu Pro Val Ile Gln Ser Leu Lys Phe Gln Asn Pro Ser Gly Thr  
 85 90 95  
 Leu Cys Gly Pro Trp Ile Lys His Thr Trp Ala Tyr Glu Cys Val Asp  
 100 105 110  
 His Trp His Met Arg Gly Asn Cys Leu Leu Gly Tyr Val Ala Leu Pro  
 115 120 125  
 Leu Ser Ile Tyr Asn Ser Asn Val Ser Glu Arg Ser Ser Ser Leu Lys  
 130 135 140  
 Leu Phe Ser Arg Ile Arg Gln Thr Val Pro Ala Asn Gln Gly Asp Glu  
 145 150 155 160  
 Phe Trp Pro Met Phe Gly Arg Ser Leu Leu Gln Trp Gly Val Thr Ser  
 165 170 175  
 His Glu Arg Ile Ile Arg Asn Leu Ser Thr Thr Leu Gly Asn Leu Ala  
 180 185 190  
 Asn Glu Leu Ala Glu Ala Ile Ala Thr Lys Arg Ser Ser Asp Ser Leu  
 195 200 205  
 Asp Arg Ile Val Met Asp Asp Gly Ile Thr Leu Gly Tyr Ile Val Val  
 210 215 220

Lys  
225

<210> 158  
<211> 215  
<212> PRT  
<213> Homo sapiens

<400> 158

Leu Pro His Leu Cys Cys Ser Leu Leu Thr Ile Lys Pro Asp Met Cys  
1 5 10 15

Leu Ser Pro Cys Leu Pro Thr His Pro Leu Ile Thr Ser Val Pro Cys  
20 25 30

Ser Gln Val Ala Ser Arg Glu Asp Cys Gly Leu Met Ser Ser Phe Met  
35 40 45

Pro Trp Leu Leu Leu Ile Arg Ala Leu Tyr Thr Phe Ser Lys Ala Leu  
50 55 60

Glu Ser Lys Lys Val Leu Leu Gly Ser Ser Pro Gln Met Gln Phe Met  
65 70 75 80

Lys Ser Val Ser Phe Ser Phe Pro Ser Glu Phe Leu Ser Val Ser Ile  
85 90 95

Lys Ala Leu Asp Thr Pro Trp Phe Thr Arg Gln Lys Leu Ile His Pro  
100 105 110

Thr Gln Pro His Gly Tyr Ser Phe Val Leu Leu Asp Asn Asn His Leu  
115 120 125

Arg Lys Pro Asp Leu Phe Pro His Ser Ser Phe Ser Phe Cys Pro Ala  
130 135 140

Glu Asn Lys Arg Thr Ser Cys His Ile Val Ile Cys Ser Ala Leu Leu  
145 150 155 160

Leu Arg Ser Leu Val Gly Lys Thr Gly Pro Ile Lys Arg Asp Thr Ala  
165 170 175

Met Pro Trp Gly Glu Asp Asn Lys Ser Asp Gly Ser Arg Ala Leu Glu  
180 185 190

Ser Arg Gly Gly Val Thr Asn Cys Pro Asn Gly Thr Val Pro Ser Glu  
195 200 205

Leu Leu His Leu Leu Leu Thr  
210 215

<210> 159  
<211> 202  
<212> PRT  
<213> Homo sapiens

<400> 159

Leu Lys Val Lys Lys Glu Tyr Pro Phe Ile Leu Asp Asn Cys Cys Gln  
1 5 10 15

Arg His Tyr Asn Ile Ser Val Val Ile Pro Tyr Phe Ser Lys Ala Lys  
20 25 30

Ile Glu Ile Trp Pro Leu Leu Leu Cys Asn Phe Leu Lys Phe Lys Val  
35 40 45

Ser Val Phe Ser Ile Ile Lys Tyr Ser Ser Leu Lys Leu Met Ala Ile  
50 55 60

Arg Tyr Ser Ile Val Trp Ile Ile Tyr Leu Arg Phe Cys Gly Leu Phe  
65 70 75 80

Cys Phe Gln Asn Asn Thr Lys Ile Asn Ile Phe Val Cys Lys Tyr Phe  
85 90 95

Thr Lys Ile Tyr Ser Glu Lys Phe Leu Lys Val Glu Phe Leu Gly Glu  
100 105 110

Val Thr Phe Lys Cys Leu Ile His Leu Leu Ser Gly Lys Thr Val Arg  
115 120 125

Phe Leu His Ser His His Ser Val Tyr Gly His Gln Leu Thr Val Phe  
130 135 140

Phe Pro Thr Leu Leu Ile Phe Ser Leu Ser Met Trp Ile Lys Phe Gly  
145 150 155 160

Phe Tyr Tyr Phe Asn Leu Tyr Ser Ile Thr Leu Leu Ala Ile Ser Leu  
165 170 175

Gly Val Val Asn Ile Cys Pro Cys Pro Phe Leu Phe Gly Met Leu Ser  
180 185 190

Leu Met Thr Asn Cys His Asn Val Ile Asn  
195 200

<210> 160

<211> 215

<212> PRT

<213> Homo sapiens

<400> 160

Asn Ile Ser Phe Leu Ser Leu Lys Met Ala Val Ser Cys Val Leu Ile  
1 5 10 15

Asn Leu Lys Ile Asn Leu Ser Ile Gly Glu Ala Gly Lys Leu Ala Trp  
20 25 30

Lys Val Asn Leu Leu Ser Arg Gly Lys Ile Ser Trp Ala Leu Ile Lys  
35 40 45

Val Asp Ile Phe Arg Gly Gly Lys Ser Lys Phe Tyr His Thr Leu Ala  
 50 55 60  
 Phe Val Gln Phe Ser Pro Leu Phe Ser Leu Tyr Tyr Leu Phe Phe Cys  
 65 70 75 80  
 Phe Thr Leu Gly Lys Ala Asn Tyr Leu Phe Ser His Ile Phe Trp Gly  
 85 90 95  
 Pro Ile Leu Met Ile Leu Ile Phe Phe Ser Cys Leu Thr Cys Arg Pro  
 100 105 110  
 Ser Thr Glu His Cys Arg Ala Ser Ser Gln Arg Ser Ser Gly Asp Glu  
 115 120 125  
 Leu Ser Phe Leu Gly Trp Asp Cys Cys Ala Gly Leu Asp Arg Thr Glu  
 130 135 140  
 Asn Cys Arg Asp Lys Tyr Thr Tyr Glu Gln Thr Ser His Leu Phe Ile  
 145 150 155 160  
 Lys Ala Leu His Trp Leu Trp Lys Thr Ala Val Gly Leu Arg Lys Leu  
 165 170 175  
 Asn Phe Leu Gly Ile Phe Val Leu Asn Ile Glu Arg Glu Arg Arg Arg  
 180 185 190  
 Phe Leu Phe Lys Arg Val Tyr Glu Thr Leu Ser Leu Lys Ser Asn Leu  
 195 200 205  
 Met Thr Gly Cys Met Cys Ser  
 210 215

<210> 161  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 161

Lys Ile Gln Ile Leu Cys His Ser Pro Ala Tyr Leu Leu Thr Leu Pro  
 1 5 10 15  
 Leu Leu Ser Lys Phe Ile Ile Leu Thr Val Val Val Asn Ala Leu Leu  
 20 25 30  
 Ser Val Pro Cys Pro Phe Val Tyr Thr His Leu Val Leu Leu Ser Phe  
 35 40 45  
 Phe Ile Asn Met Leu His His Thr Val Ile Phe Leu Leu Ile Phe Phe  
 50 55 60  
 Lys Lys Val Trp Asn Ile Ser Phe Pro Leu Cys Val Leu Cys Asn Leu  
 65 70 75 80  
 Ser Asp Lys Thr Thr Cys Tyr Ile Phe Ser Thr His Asn Phe Ile Ser





Pro Phe Gln Thr Arg Ile Tyr Phe Phe Ser Leu Lys Gln Asn Lys Met  
 145 150 155 160  
 Phe Asn Leu Lys Pro Leu Gln Asn Thr Asn Leu Tyr Leu Lys Asn Leu  
 165 170 175  
 Asn Ile Gly Glu Asn Glu Thr Val Tyr Ala Gln Val His Asp Trp Trp  
 180 185 190  
 Arg Leu Lys Ser Ser Lys Ile Phe Leu Lys Gly Tyr Pro Ser Arg Arg  
 195 200 205  
 Leu Asn Cys Leu Ile  
 210  
 <210> 163  
 <211> 236  
 <212> PRT  
 <213> Homo sapiens  
 <400> 163  
 Leu Ala Ser Glu Ser Leu Leu Val Arg Lys Glu Val Val Leu Phe Pro  
 1 5 10 15  
 Leu Gln Ala Lys Ala Phe Gln Val Leu Ser Phe Cys Ser Ile Lys Arg  
 20 25 30  
 Gln Leu Arg Gly Arg Tyr Pro Gln Glu Phe Pro Asp Ser Cys Thr Asp  
 35 40 45  
 Leu Ser Ala Glu Ile Ala Glu Val Ser Trp His Leu His Glu His Leu  
 50 55 60  
 Ser Val Ala Gly Arg Ile Asn Gly Lys Arg Ala Thr Glu Ile Pro Gly  
 65 70 75 80  
 Ala Lys Ser Ser Ser Glu Ser Pro Ile Phe Asp Gln Glu Leu Val Gly  
 85 90 95  
 Ser Leu Arg Ile Cys Ile Ser Ser Asp Ser Arg Leu Ser Gly Leu Ser  
 100 105 110  
 Asn Trp Asp Gln Ser Asn Ser Tyr His Ala Tyr Leu Val Pro Gly Ser  
 115 120 125  
 Leu Leu Arg Ala Ser Trp Thr Pro Ala Arg Val Ser Pro His Ser Asn  
 130 135 140  
 His Met Arg Tyr Val Leu Leu Leu Ser Pro Cys Ala Asp Glu Asp Thr  
 145 150 155 160  
 Arg His Arg Glu Asn Trp Pro Gln Val Tyr Ser Trp Gly Gly Gln Ser  
 165 170 175  
 Gln Asn Ser Asp Leu Gly Cys Leu Gly Cys Glu Leu Val Trp Ala Ser  
 180 185 190

Met Gly His Arg Gly Arg Ile Ser Trp Arg Ser Arg Thr Glu Gly Lys  
195 200 205

Arg Asp Glu Ile Ser Asp Ser Ala Gly Ser Glu Thr Leu Ser Ala Met  
210 215 220

Ile Lys Pro Asp Tyr Gly Thr Cys Phe Ser Leu Ser  
225 230 235

<210> 164

<211> 193

<212> PRT

<213> Homo sapiens

<400> 164

Phe Gln Asp Ile His His Arg Cys Gly Arg Gly Lys Lys Thr Met Gly  
1 5 10 15

Met Gly Ile Leu Pro Phe Ile Asn Thr Gly His Phe Asn Leu Leu Asn  
20 25 30

Leu Ser Thr Phe Cys Asn Leu Arg Ile Phe Ile Leu Asp Ser Trp Thr  
35 40 45

Lys Ala Leu Glu Met Ala Ser Phe Ala Arg Phe Leu Cys Ala Leu Glu  
50 55 60

Lys Ile Pro Gly Phe Asn Ala Lys Asn Arg Gln Gln Arg Ala Gln Glu  
65 70 75 80

Met Glu Leu Ser Gly Val Leu Leu Gln Leu Arg Thr Val Cys Tyr Ser  
85 90 95

Pro Phe Lys Ile Ser Pro Asn Leu Tyr Leu Met Val Lys Asp Val Phe  
100 105 110

Phe Phe Leu Leu Glu Glu Lys Val Thr Arg Ile His Gly Ser Gly Leu  
115 120 125

Ile Val Leu Leu Leu Met Glu Ile His Lys Gln Phe Leu Lys Tyr Ser  
130 135 140

Leu Ala Ser Glu Leu Val Trp Asn Leu Ala Val Tyr Leu Leu Asp Trp  
145 150 155 160

Val Thr Thr Ala Val Ala Gly Ser Ile His Tyr Thr Arg Leu Cys Ile  
165 170 175

Ser Met Met Ile Val Lys Phe Cys Glu Lys Val Leu His Leu Cys Ser  
180 185 190

Leu

<210> 165

<211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 165

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Leu Phe Ser Ala Phe Ser Leu Ile Leu His Leu Thr Gly Leu Val Val
1           5           10           15

Asn Ile Leu Lys Val Tyr Val Leu Ile Lys Thr Ser Ser Phe Pro Lys
          20           25           30

Glu Lys Lys Ser Gln Phe Gly Leu Val Ser Leu Ser Cys Phe Leu His
          35           40           45

Leu Thr Asn Val Ser Phe Ile Tyr Ser Phe Cys Ser Val Thr Phe Arg
          50           55           60

Met Ile Leu Met Gly Lys Asn His Gly Ser Tyr Lys Gln Pro Phe Lys
65           70           75           80

Thr Ile Val Ile Leu Cys Ser Val Asp Ser Gly Arg Gly Phe Lys Val
          85           90           95

Ile Ile Ser Leu Lys His Cys Val Asn Ile Pro Pro Thr Val Val Pro
          100          105          110

Leu Gly Thr Gly Lys Ile Gln Asn Trp Pro Ala Ser Ser Leu Thr Arg
          115          120          125

Val Ile Lys Val Arg Leu Leu Tyr Ile Lys Gln His Leu Asn Ala Trp
          130          135          140

Cys Val Ala Ala Gly Lys Gln Pro Arg Ser Pro Ser Cys Ile Arg Gly
145           150           155           160

Leu Met Asn Val Ser Ile Ala Val Phe Ala Val Thr Arg Ser Gly Arg
          165          170          175

Val Phe Pro Ser Ser Leu Asp Cys Leu Pro Met His Thr Gly Val Cys
          180          185          190

Ile Gly Lys Gln Ser Arg Leu
          195

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<210> 166  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 166

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Ile Trp Cys Phe His Arg Leu Lys Gly Leu Arg Cys Pro Pro Val Ala
1           5           10           15

Val Ala Cys Gly Ser Leu Cys Ser Cys Leu Pro Ser Trp Ala Gln Tyr
          20           25           30

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Leu Val Leu Cys Leu Gly Phe Thr Asn Ala Thr Asn Thr Tyr Ala Pro  
           35                          40                          45  
 Thr Leu Cys Gln Val Leu Cys Tyr Met Leu Arg Lys Gln Cys Thr Arg  
           50                          55                          60  
 Trp Ile Arg Phe Ser Ser Leu Trp Cys Pro Ser Ser Gly Lys Asp Arg  
   65                          70                          75                          80  
 Leu Ser Val Phe Tyr Gly Gln Ala Tyr Arg Ala Lys Lys Thr Cys Val  
                           85                          90                          95  
 Gly Met Gly Gln Gly Arg Tyr Pro Trp Ser Ser Pro Val Thr Gly Ile  
                           100                          105                          110  
 Arg Leu Arg Val Ile Val Gly Arg Ala Leu Gln Ala Gly Gly Ser Ala  
           115                          120                          125  
 Cys Ala Arg Val Leu Arg Lys Glu Gly Glu Gln Cys Val Arg Asn Ile  
           130                          135                          140  
 Thr Val Val Ala Thr Gln  
   145                          150  
  
 <210> 167  
 <211> 218  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 167  
  
 Ile Ile Ile Arg Ile Ile Arg Ile Leu Lys Tyr Pro Asn Asn Gln Val  
   1                          5                          10                          15  
 Asn Lys Ala Thr Phe Tyr Gly Ile Ile His Phe Cys Phe Glu Lys Tyr  
           20                          25                          30  
 Thr Leu Phe Lys Tyr Tyr Cys Leu Phe Thr Gln Leu Leu Glu His Ser  
           35                          40                          45  
 Ser Ala Lys Ala Phe Met Ile Phe Thr Asn Leu Ala Phe Ile Phe Ala  
           50                          55                          60  
 Leu Leu Ser Thr Ile Thr Lys Val Ile Thr Thr Cys Ser Pro Thr Asn  
   65                          70                          75                          80  
 Tyr Ser Asp Gly Ala Leu Arg Ile Asp Leu Tyr Leu Asn Ile Leu Trp  
                           85                          90                          95  
 Tyr Gln Val Phe Leu His Ser Ser Arg Ile Phe His Phe Ala Tyr Ile  
           100                          105                          110  
 Leu Met Met Ser Ser Arg Ile Ser Ser Leu Thr Tyr Leu Ala Asn Tyr  
           115                          120                          125  
 Lys Tyr Val Ile Phe Val Lys Tyr Leu Arg Val Cys Ser Ala Ile Tyr

130		135		140
Leu Val Ile Leu Asn Gln Ile Leu Asn Val Tyr Thr Phe Leu Met Tyr				
145		150		155 160
Asn Phe Gln Phe Phe Arg Met Arg Leu Asn Asn Cys Pro Tyr Tyr Ser				
	165		170	175
Phe Ile Thr Thr Leu Ile Tyr Leu Leu Tyr Leu Gln Met Ile Tyr Lys				
	180		185	190
Asn Ala Phe Leu Tyr Leu Ser Leu Ser Gln Val Leu His Ser Glu Leu				
	195		200	205
Phe Phe Leu Phe Val Phe Leu Arg Tyr Ile				
210		215		
<210> 168				
<211> 204				
<212> PRT				
<213> Homo sapiens				
<400> 168				
Tyr Cys Glu Leu Arg Cys Tyr Ile Ser Glu Cys Asn Glu Trp Asp Ile				
1	5		10	15
Ala His Trp Leu Glu Lys Pro Pro Lys Gln Ala Ala Ser Ala Ile Glu				
	20		25	30
Leu Leu Ala Trp Ser Arg His Ser Ala Ser Gly His Gly Asp Asn Ser				
	35		40	45
Ser Glu Ile Asn Ser Ser Thr Lys Val Ser Asn Asp Val Ile Ser Ser				
	50		55	60
Gln Arg Gln Gly Cys Pro Val Lys Gln Thr Asp Gly Gln Ser Pro Pro				
65	70		75	80
Arg Leu Lys Gly Gly Gly Glu Thr Gly Arg Lys Arg Met Arg Trp Val				
	85		90	95
Arg Lys Arg Tyr Asn Leu Arg Val Thr Met Ser Ser Cys Ser Pro Arg				
	100		105	110
Trp Gln Trp Val Gly Gly Pro Gly Lys Asp Cys Phe Arg Gln Met Glu				
	115		120	125
Gln Cys Met Arg Arg Ser Arg Glu Lys Ser Gln Ile Val Cys Ile His				
	130		135	140
Val Leu Gln Asn Arg Glu Ser Asn Arg Tyr Leu Gly Lys Lys Lys Glu				
145	150		155	160
Val Ser Leu Phe Leu Ser Leu Lys Val Gln Lys Trp Ala Phe Pro Gln				
	165		170	175

Phe Ile Cys Gln Pro His Glu Val Phe Thr Asp Leu Asp Leu Leu Ile  
180 185 190

Ser Cys Tyr Phe Ile Thr Leu Leu Glu Leu Leu Pro  
195 200

<210> 169  
<211> 158  
<212> PRT  
<213> Homo sapiens

<400> 169

Lys Val Leu Ile Phe Val Leu Arg Pro Ile Tyr Thr Tyr Lys Cys His  
1 5 10 15

Pro Ser Ile Phe Leu Cys Asn Phe Leu Ser Ala Gly Leu Pro Ser Leu  
20 25 30

Met Cys Val Leu Tyr Phe Pro Tyr Ile Cys Tyr Pro Ile Thr Cys Phe  
35 40 45

Tyr Asn Cys Leu Phe Tyr Phe Pro Phe Phe Ser His Cys Leu His Ala  
50 55 60

Leu Phe Leu Val Leu Asn Ser Ile Thr Leu Ile His Cys Ser Ser Asn  
65 70 75 80

Phe Ile Leu Asn Asn Phe Pro Ile Tyr Leu Asp Ile Tyr Leu Asn Val  
85 90 95

His Ile Ser Pro Leu Ile Glu Val Cys Leu Val Ile Phe Gly Met Met  
100 105 110

Leu Asn Leu Phe Leu Trp Lys Gly Thr Asn Thr Cys Met Phe Met His  
115 120 125

Val Gln Lys Cys Ser His Arg Met Ile Ile Lys Ala Asp Leu Gly Lys  
130 135 140

Lys Thr Ser Leu Ile Phe Ile Phe His Ile Arg Phe Phe Glu  
145 150 155

<210> 170  
<211> 198  
<212> PRT  
<213> Homo sapiens

<400> 170

His Gln Asn Ser Pro Ile Tyr Leu Arg Ile Asn Val Asn Phe Glu Phe  
1 5 10 15

Asp Ile Thr Met Ile Lys Gly Ala Leu Ile Phe Ser Arg Ser Tyr Lys  
20 25 30

Ile Phe Val Asn Glu Leu Ile Gly Arg Ile Cys Leu Leu Lys Ser Glu

35	40	45
Val Gly Gly Glu Leu Lys Leu Gly Leu Ile Gly Asn Tyr Ile Trp Val		
50	55	60
Met Asn Ala Trp Gly Phe Ile Ile Pro Leu Pro Leu Pro Leu Ser Val		
65	70	80
Phe Glu Leu Cys His Cys Glu Asn Ile Val Leu Lys Ala Val Leu Phe		
	85	90
Phe Leu Leu Arg Gly Ser Lys Lys Ser Lys Lys Tyr Thr Gly Leu Ile		
	100	110
Glu Tyr Val Cys Ser Asn Lys Ile Pro Gly Phe Ser Phe Val Leu Ala		
	115	120
Ser Arg Asn Gln Val Gln Phe Val Ser Lys Asp Phe Ala Thr Cys Gly		
	130	140
Gly Lys Leu Leu Gln Asp Leu Ile Val His Ser Gln Arg Leu Ser Ala		
	145	155
Ala Arg Gln Ala Ala Phe Tyr Glu Asn Asp Asn Gln Lys Ala Gly Ala		
	165	170
Leu His Thr Gly His Ser Ser Asn Glu Ser Trp Asp Leu Asp His Gly		
	180	185
Ser Leu Thr Trp Ala Ala		
	195	

<210> 171  
 <211> 176  
 <212> PRT  
 <213> Homo sapiens

<400> 171

Leu Lys Val His Val Leu Ile Tyr Ile His Gln Ile Thr Thr Thr Ser		
1	5	10
Ser Phe Leu Phe Ile Ser Leu Leu Pro Phe Ile Ser Phe Ile His Met		
	20	30
Leu Ser Leu Asn Thr Leu Leu Leu Leu Thr Val Ile Phe Gln Ile		
	35	45
Ser Glu Lys Asn Leu Ile Leu Pro Tyr Ser Thr Phe Leu Met Leu Phe		
	50	60
Leu Phe Tyr Ala Val Leu Phe Asp Ile Ser His Arg Ala Gly Gln Leu		
65	70	80
Ala Met Asn Tyr Ser Ser Phe Val Cys Gln Lys Ile Ser Leu Phe Leu		
	85	90

Ile Arg Ile Ile Leu Leu Asn Ala Glu Phe Gly Ser Phe Phe Val Ala  
100 105 110

Thr Leu His Val Phe Ser Phe Leu Cys Val Cys Met Val Ser Glu Glu  
115 120 125

Lys Asp Asn Val Ile Leu Ile Leu Phe Pro Leu Trp Ile Arg Cys Trp  
130 135 140

Leu Phe Pro Leu Ser Ser Phe Phe Gln Asp Phe Leu Phe Ser Leu Val  
145 150 155 160

Phe Cys Ser Leu Asn Met Ile Cys Leu Gly Gly Asp Leu Asp Leu Leu  
165 170 175

<210> 172  
<211> 195  
<212> PRT  
<213> Homo sapiens

<400> 172

Ala Tyr Arg Ile Ser Thr Thr Val Phe Ala Lys Glu Lys Ser Val Val  
1 5 10 15

Ile Lys Phe Ile Leu Trp Leu Asn Tyr Val Leu Gln Phe Val Gly Pro  
20 25 30

Val Thr Cys Gly Arg Gln Arg Ala Val Gly His Ser Val Lys Ala Thr  
35 40 45

Thr Arg Val Leu Ser Ile Glu Ser Leu Cys Ile Met Val Leu Ala Arg  
50 55 60

His Cys Ser Leu Thr Ser Ile Phe Leu Ser Gln Ser Ser Leu Arg Asn  
65 70 75 80

Ala Cys Ser Thr Gly Leu Ile Ile Leu Thr Glu Thr Ser Gly His Phe  
85 90 95

Met Ser Tyr Gly Met Leu Ala Glu Asp Ile Lys His Arg Cys Val Gly  
100 105 110

Ile Gly Gly Glu Ser Thr Ala Ile Phe Gln Leu Gly Ala Pro Trp Phe  
115 120 125

Pro Glu Ile Gln Ser His Gly Val Asn Gln Thr Pro Leu Ser Gly Ala  
130 135 140

Leu Cys Ser Thr Gln Asp Pro Thr Leu Ser Gly Lys Leu Lys Thr Lys  
145 150 155 160

Ser Leu Leu Tyr Ile Arg Phe Ile Lys Asn Ala Thr Ile Thr Lys Ser  
165 170 175

Leu Trp Ala Cys Val Glu Asn Ala Val Ile Lys Leu Asn Ile Lys Ala  
180 185 190



Ser Ser Lys  
195

<210> 173

<211> 225

<212> PRT

<213> Homo sapiens

<400> 173

Gln Arg Leu Thr Tyr Ser Asn Cys Ile Val Asp Trp Ala His Thr Leu  
1 5 10 15

His Val Thr Asn Val Ser Asn Tyr Trp Ile Cys Thr Ala Leu Pro Ala  
20 25 30

Gly Leu Arg Met Ala Cys Leu Gly Thr Tyr Ile Leu Cys Leu Gln Arg  
35 40 45

Thr Gly His Gly Trp Arg Leu Gly Gly Pro Met Ala Asp Ala Trp Asn  
50 55 60

Ala Thr Trp Gln Leu Trp Thr Lys Asp Ala Ala Arg His Met Val Cys  
65 70 75 80

Pro Thr Pro Gly Trp Pro Ile Ala Phe Met Met Gly Leu Ala Ser Gly  
85 90 95

Glu His Val Val Leu Pro Ala Gln Val Pro Gln Cys Ile Glu Gln His  
100 105 110

Trp Gly Asn Thr Thr Val Gly Trp Val Pro Val Thr Ala Phe Ala Asn  
115 120 125

Ile Thr His Val Thr Thr Lys Val Arg Pro Leu Thr Leu Cys Pro Leu  
130 135 140

Gly Val Tyr Gly Ser Val Gly Thr Gln Ser Arg Phe Thr Tyr Pro Thr  
145 150 155 160

Ala Leu Asp Ile Val Pro Gly Gly Gly Leu Met Cys Leu Pro Leu Phe  
165 170 175

Ser Pro Cys Cys Pro Asp Ala Arg Ile Thr Gly Arg Cys Tyr Thr Leu  
180 185 190

Ser Leu Cys Glu Cys Asn Glu Pro Pro Ala Val Leu Pro Phe Gly Ser  
195 200 205

Asp Tyr Pro Trp Ser Gly Cys His Asn Cys Arg Ser Thr Gly Tyr Cys  
210 215 220

Ser  
225

<210> 174

<211> 169  
 <212> PRT  
 <213> Homo sapiens

<400> 174

Phe Met Ile Gln Gln Ile Lys Cys Gly Asn Tyr Leu Lys Arg Lys Lys  
 1 5 10 15  
 Lys Asn Ile Trp Glu Ala Ala Glu Met Arg Thr Ile Arg Asn Glu His  
 20 25 30  
 Phe Tyr Phe Leu Ser Phe Leu Asn Gly Ala Ser Asp Ala Val Phe Ile  
 35 40 45  
 Ala Leu Phe Phe Pro Asn Trp Asn Ile Phe Phe Leu Ile Leu Leu Val  
 50 55 60  
 Tyr Ser Leu Val Thr Lys Lys Val Phe Arg Lys Tyr His Asn Phe Pro  
 65 70 75 80  
 Asn Ser Leu Leu Ser Ala Gly Asp Tyr Glu Tyr Ile Leu Gln Asn Gly  
 85 90 95  
 Lys Gly Gly Ser Ser Gly Pro Ala Thr Ile Cys Ile Leu Lys Asp Leu  
 100 105 110  
 Val Glu Leu Lys Ser Gln Arg Lys Trp Glu Glu Leu Ser Lys Tyr Phe  
 115 120 125  
 Ile Ile Phe Phe Leu Glu Tyr Gln Val Leu Ile His His Ile Phe His  
 130 135 140  
 His Val Ser Lys Ser Phe Phe Leu Lys Lys Val Cys Ile Tyr Ile Ser  
 145 150 155 160  
 Lys Arg Val Ser Val Val Lys Lys Asn  
 165

<210> 175  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 175

Glu Asn Thr Tyr Gly Lys Glu Leu Ser Val Arg Phe Gly Ser Gln Ile  
 1 5 10 15  
 Leu Ile Phe Asn Lys Ile Tyr Ile Cys Ser Pro Cys Thr Lys Gly Asn  
 20 25 30  
 Ser Thr Glu Ser Met Pro Asn Ser Lys Gly Met Thr Leu Asn Leu Tyr  
 35 40 45  
 Ser Lys Tyr Ile Gly Pro Ala Ile Leu Cys Gln Met Leu Tyr Leu Tyr  
 50 55 60

Leu Ile Ala Thr Arg Thr Gly Asn Cys Ala Gln Leu His Leu Arg Thr  
65 70 75 80

Val Ser Ile Leu Lys His Thr Ser Tyr Ser Ser Ser Asp Pro His Trp  
85 90 95

Met Lys Leu Asn Gln Thr Lys Gln Lys Ser Tyr Leu Ser Pro Asn Asn  
100 105 110

Glu Arg Val Cys Arg Met His Ile Val Arg Leu Thr Asp Pro Phe Arg  
115 120 125

Gln Tyr Val Gly Phe Pro Arg Ile Leu Ser Ala Ser Lys Gln Phe Glu  
130 135 140

Phe Ser Ser Ala Leu Met Ile Trp Phe Pro His Leu Asp Gly Pro Gly  
145 150 155 160

Ser Asp Ala Arg Gly Pro His Glu Met Ser Trp Ala Phe Ile Gln Asp  
165 170 175

Pro Val Ala Pro Ala Gln Glu Asn Arg Pro Leu Arg Val Ser Gly Ser  
180 185 190

Glu Met Ala Ser Val Thr Arg  
195

<210> 176

<211> 204

<212> PRT

<213> Homo sapiens

<400> 176

Leu Phe Asn Phe Val Phe Val Ala Val Val Cys Ile His Val Cys Trp  
1 5 10 15

Cys Pro Tyr Val Leu Phe Gly Val Trp Leu Phe Ser Gln Asn Gln Val  
20 25 30

Thr Val Lys Ser Leu Asn Phe Ser Ile Ser Leu Leu Ser Ser Gly Thr  
35 40 45

Val Thr Val Cys Leu Leu Leu Lys Ser Phe Val Phe Leu Thr Arg Gly  
50 55 60

Glu Val Tyr Ser Thr Leu Thr Gly Leu Tyr Phe Gly Leu Arg Pro Tyr  
65 70 75 80

Lys Thr Phe Leu Lys Ser Leu Ile Ile Cys His Ile Ile Lys Lys Leu  
85 90 95

Tyr Gly Ile Phe Ser His Tyr Ile Leu Ala Thr Met Pro Val Tyr Ile  
100 105 110

Ser Lys Gln Thr Ile Cys Gly Asn Asn Leu Lys Lys Lys Ala Ile Gly

115	120	125
Ser Lys Tyr Leu Ile Lys Tyr Pro Leu Glu Leu Asn Ile Ser Ser Cys		
130	135	140
Gly Ser Ser His Thr Lys Tyr Pro Thr Leu Leu Ser Phe Arg Val Leu		
145	150	155
Ala Gly Thr Gly Ser Ile Lys Asp Asn Glu Leu Lys Lys Gly Thr Ile		
165	170	175
Tyr Lys Tyr Val Ala Arg Leu Gly Glu Thr Ser Lys Val Gly Asn Ala		
180	185	190
Ala Gln Asp Ser Asn Lys Ser Glu Asn Leu Phe Leu		
195	200	
<210> 177		
<211> 201		
<212> PRT		
<213> Homo sapiens		
<400> 177		
His Val Thr Leu Met Ser Thr Val Phe Ser Ser Val Ala Ser Thr Pro		
1	5	10
Leu Pro Asn Ser Tyr Asp Asn Ser Ala Ser Gln Thr Tyr Gly Leu Arg		
20	25	30
Asn Pro Leu Lys Ser Gln Leu Val Met Thr Pro Lys Arg Phe Phe Ile		
35	40	45
Ile Ile Leu Tyr Ile Asn Ile Leu Leu Glu Val His Phe Tyr Glu Asn		
50	55	60
Asn Leu Phe Ser Lys Ile Ser Glu Lys Asn Ser Ile Ile Leu His Ile		
65	70	75
Gly Ile Phe Leu Met Pro Gly Leu Ile Glu Asp Asn Ile Phe Met Ser		
85	90	95
Thr Ser Gly Phe Asp Leu Phe Gln Tyr Val Ser Leu Val Glu Ile His		
100	105	110
Glu Gly Asn Leu Gly Ser Ser Asp Ile Leu Glu Lys Gly Gly Val Phe		
115	120	125
Gln Pro Phe Trp Thr Thr Val Asp Ile Val Leu Tyr Tyr Asn Lys Thr		
130	135	140
Gly Glu Val Val Gly Ser Lys Leu Val Ala Thr Trp Asn Leu Lys Pro		
145	150	155
His His Glu Leu Phe Val Ile Trp His Ile Lys Ile Tyr Leu Ser Ile		
165	170	175

Leu His Phe Glu Trp Asp Pro Leu Leu Met His Leu Phe Val Thr Ile  
180 185 190

Ile Ser Asn Thr Leu Val His Val Met  
195 200

<210> 178

<211> 216

<212> PRT

<213> Homo sapiens

<400> 178

Ile Lys Ile Pro Ala Val Lys Leu Asp Ser Ala Cys Leu Gly Ile Phe  
1 5 10 15

Lys Arg Ile Met Tyr Arg Gly Cys His Gly Asn Ser Ser Ser Gly Asn  
20 25 30

Ser Val Pro Phe Val Lys Thr Leu Lys Gly Glu Asp Lys Gln Phe Gly  
35 40 45

Glu Ile Thr Ala Pro Glu Ile Glu Phe Ile Cys Asn Leu Gly Ser Leu  
50 55 60

Val Cys Leu Pro Ala Ile His His Val Asp Glu Lys Gln Lys Asp Lys  
65 70 75 80

Lys Asp Ser His Phe Lys Ala Pro Asn Cys Gln Phe His Ser Ile Ala  
85 90 95

Asp Ser Gln His Arg Arg Lys Trp Asp Asn Ala Gly Arg His Tyr His  
100 105 110

Arg Thr Val Ser Ser Lys Glu Lys Pro Asn Cys Tyr Phe Ser Met Ala  
115 120 125

Glu Gly Gly Cys Phe Pro Arg Gly Arg Ile Leu Phe Asn Pro Val Arg  
130 135 140

Ala Gln Leu Gln Pro Ser Val Thr Gly Gln Leu Pro Pro Ser Asn Pro  
145 150 155 160

Glu Gly Arg His Glu Pro Tyr Ser Arg Thr Gly Ala Cys Ser Leu Leu  
165 170 175

Ser Thr Ser Cys Thr Phe Arg Ala Pro Ala Trp Asp Ala Glu Asn Ser  
180 185 190

His Pro Ser Arg Ala Ala Glu Asp His Met Thr Asp His Gln Leu Phe  
195 200 205

Leu Thr His Leu Ser Thr Thr Thr  
210 215

<210> 179

<211> 189

<212> PRT  
 <213> Homo sapiens

<400> 179

Ser	Gln	Asn	Phe	Asp	Leu	Thr	Asn	Gln	Arg	Gly	Gly	Leu	Val	Phe	Phe	1	5	10	15
Tyr	Leu	Leu	Ser	Ala	Phe	Cys	Phe	Arg	Leu	Leu	Asn	Leu	Tyr	Ile	Lys	20	25	30	
Thr	Cys	Tyr	Thr	His	Leu	Ala	Val	Phe	Phe	Phe	Ala	Ala	Val	Thr	Ser	35	40	45	
Phe	Trp	Leu	Arg	Phe	Phe	Phe	Lys	Lys	Met	Tyr	Lys	Thr	Leu	Gly	Leu	50	55	60	
Ile	His	Cys	Ser	Phe	Phe	Val	Leu	Ile	His	Pro	Gln	Glu	Arg	Lys	Trp	65	70	75	80
Leu	Ser	Leu	Tyr	Val	Phe	Lys	Gly	Leu	Cys	Glu	Leu	Leu	Lys	Ala	Ser	85	90	95	
Val	Thr	Ala	Arg	Thr	Ser	Val	His	Lys	Gln	Val	Gln	Asp	Ala	Ala	Glu	100	105	110	
Gly	Val	Ser	Ser	Leu	Thr	Glu	Arg	Gly	Ile	Glu	Leu	Phe	Arg	Met	Phe	115	120	125	
Cys	Val	Gly	Thr	Asp	Arg	Leu	Lys	Ala	Thr	Asp	Leu	Met	Glu	Val	Trp	130	135	140	
Ser	Phe	Gln	Gln	Met	Ser	Ser	Asn	Leu	Thr	Asn	Leu	Asp	Leu	Val	Phe	145	150	155	160
Pro	His	Gly	Pro	Arg	Ser	Ala	Ile	Leu	Phe	Phe	Cys	Leu	His	Leu	Ile	165	170	175	
Ser	Tyr	Ala	His	His	Cys	Ala	Asn	Ser	Arg	Leu	Phe	Ser	180	185					

<210> 180  
 <211> 157  
 <212> PRT  
 <213> Homo sapiens

<400> 180

Val	Ala	Ile	Cys	Gln	Val	Pro	Thr	Asp	Ile	Pro	Asn	Ile	Arg	Leu	Thr	1	5	10	15
Pro	Ser	Asn	Gln	His	Pro	Glu	Phe	Lys	Val	Cys	Ile	His	Phe	Leu	Tyr	20	25	30	
Phe	Tyr	Cys	Ile	Arg	Ile	Ser	Leu	Asn	Ser	Ser	Val	Phe	Ser	Thr	Phe	35	40	45	

Ile Tyr Gln Pro Tyr Leu Pro Phe Cys Asn Leu Leu Phe Ser Val Ser  
 50 55 60  
 Ile Ile Phe Met Arg Leu Met His Ile Ala Val Tyr Ser Phe Leu Leu  
 65 70 75 80  
 Leu Tyr Asn Ser Val Ile Pro Gly Met Gly Arg Gly Asn Trp Phe Gln  
 85 90 95  
 Asp Leu Cys Gly Leu Gln Asn Pro Ser Met Phe Lys Ser Leu Ile Asn  
 100 105 110  
 Glu Ala Val Leu Ala Tyr Asn Leu Cys Thr Phe Leu Arg Thr Leu Ser  
 115 120 125  
 Lys Cys Tyr Val Asn Gly Cys Phe Val Ile Cys Ile Ile Phe Ile Val  
 130 135 140  
 Met Phe Phe Leu Leu Phe Ser Pro Glu Phe Phe Phe Phe  
 145 150 155  
 <210> 181  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens  
 <400> 181  
 Val Thr Leu Val Cys Tyr Ser Leu Met Val Arg Ser Leu Ile Lys Pro  
 1 5 10 15  
 Glu Glu Asn Leu Met Arg Thr Gly Asn Thr Ala Arg Ala Arg Ser Ile  
 20 25 30  
 Arg Thr Ile Leu Leu Val Cys Gly Leu Phe Thr Leu Cys Phe Val Pro  
 35 40 45  
 Phe His Ile Thr Arg Ser Phe Tyr Leu Thr Ile Cys Phe Leu Leu Ser  
 50 55 60  
 Gln Asp Cys Gln Leu Leu Met Ala Ala Ser Val Ala Tyr Lys Ile Trp  
 65 70 75 80  
 Arg Pro Leu Val Ser Val Ser Ser Cys Leu Asn Pro Val Leu Tyr Phe  
 85 90 95  
 Leu Ser Arg Gly Ala Lys Ile Glu Ser Gly Ser Ser Arg Asn Gly Arg  
 100 105 110  
 Thr Ser Trp Val Ser Ile Gln Leu Gly Gly Arg Asp Ala Gln Gly Thr  
 115 120 125  
 Asp Leu Gly Asn Ala Lys Val Lys Leu Gly Lys Asn Glu Leu Gln His  
 130 135 140  
 His Gln Gln Leu Val Cys Thr Gln Met Ser Ala Gly Gly Arg Gly Ala  
 145 150 155 160

Gln Asp Leu Leu Lys Val Ser Cys Cys Lys Gly His Phe Tyr Ile Asp  
165 170 175

Val Lys Val Asn Lys Ser Met Glu Arg Ala Thr Lys Thr Lys Glu Asn  
180 185 190

Phe Leu Lys Glu Ser His Trp Ser Leu Val Ile Gln Val Ser Ala Gln  
195 200 205

Met Ser Pro Leu Arg Asp His Ser Cys Pro Pro  
210 215

<210> 182

<211> 181

<212> PRT

<213> Homo sapiens

<400> 182

Gln Gly Glu Gly Gly Thr Gly Tyr Lys Arg Ser Ala Ala Ala Ala Pro  
1 5 10 15

Ala Glu Ser Arg Arg Ala Gln His Ser Cys Pro Leu Asp Pro Ala Asp  
20 25 30

Pro Ser Arg Ala Pro Ser Val Pro Gln Ala Gln Pro Pro Gly Gly Arg  
35 40 45

Ala Gln Gly Ser Pro Gly Arg Cys Gln Gly Ala Ile Leu Glu Gly Gly  
50 55 60

Arg Glu Glu Glu Val Arg Ala Ala Met His Thr Val Ala Thr Ser Gly  
65 70 75 80

Pro Asn Ala Ser Trp Gly Ala Pro Ala Asn Ala Ser Gly Cys Pro Gly  
85 90 95

Cys Gly Ala Asn Ala Ser Asp Gly Pro Val Pro Ser Pro Arg Ala Val  
100 105 110

Asp Ala Trp Leu Val Pro Leu Phe Phe Ala Ala Leu Met Leu Leu Gly  
115 120 125

Leu Val Gly Asn Ser Leu Val Ile Tyr Val Ile Cys Arg His Lys Pro  
130 135 140

Met Arg Thr Val Thr Asn Phe Tyr Ile Gly Glu Cys Gly Pro Leu Arg  
145 150 155 160

Arg Thr Cys Cys Arg Pro Gly Gly Leu Arg Gly Pro Ser Gly Leu Gly  
165 170 175

Arg Pro Leu Ala Thr  
180

<210> 183



<211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 183

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Ile Ile Leu Gln Asp Asn Leu Lys Gln Tyr Leu Val His Ile Asn His
1           5           10           15

Phe Ile Ser Ala Gly Leu Leu Ser Phe Glu Asn Tyr Phe Tyr His Leu
20           25           30

Leu Leu Ala Thr Val Asn Leu Ser Asn Leu Val Ser His His Ser Leu
35           40           45

Ile Pro Cys Ser Ala Leu Val Thr Met Asn Leu Ser Leu Leu Leu Lys
50           55           60

Tyr Ala Ile Tyr His Val Phe Phe Phe Pro Phe Ser Leu Pro Glu Ala
65           70           75           80

His Thr Pro Ser Leu Gly Trp Leu Lys Ser His Asn Leu Thr Phe Gly
85           90           95

Leu Thr Phe Tyr Asn Ser Leu Tyr Gln Pro Gln Asn Met Ala Trp Val
100          105          110

Met Leu Ala Leu Thr Val Leu Asp Phe Ser Asp Pro Ser Leu Leu Ile
115          120          125

Tyr Gln Pro Leu Ser Arg Ser Phe Gly Thr Tyr Ser Asp Phe His Thr
130          135          140

Pro Glu Leu Phe Ala Ile Leu Phe Ile Trp Lys Ser Tyr Trp Val Ile
145          150          155          160

Phe Leu Phe Lys Tyr Asn Leu Ile Ile Thr Pro Leu Val Tyr Leu Ala
165          170          175

Leu Ser Cys Ser Leu Tyr Phe Pro Cys Pro His Leu Asn Ser Leu Thr
180          185          190

Gly Glu Ile Asn Tyr Arg Tyr Thr Lys Gly Pro Asp Ser Lys Arg Asn
195          200          205

Ile Gly Lys Ile Ser Ser Pro Ser Gln Pro Gly Tyr Gln Ile Lys Asp
210          215          220

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Arg Arg Leu  
 225

<210> 184  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 184

Pro Pro Thr Asp Ile Ser Val Cys Cys Ser Asp Gln Val Leu Gly His  
 1 5 10 15  
 His Gln Cys Pro Val Val Met Gly His Leu Lys Leu Tyr Leu Tyr Pro  
 20 25 30  
 Ser Ala Leu Leu Leu Asp Leu Leu His His Leu Leu His Met Asp Leu  
 35 40 45  
 Leu His Phe Gly Cys Val Val His His Leu His Thr Leu Pro Asn Lys  
 50 55 60  
 Asn Ile Gln Lys Pro Ser Ser Gln His His Cys Pro Gly His His Ser  
 65 70 75 80  
 Ser Leu Phe Phe Leu Asn Pro Ser Leu His Glu Arg Gln Arg Arg Leu  
 85 90 95  
 Thr Gly Ser Pro Leu Leu Val Asn His Met Lys Ile Lys His Ala Tyr  
 100 105 110  
 Ser Val Leu Val Gln Gln Glu Ile Tyr Phe Gln Thr Arg Lys Ala Thr  
 115 120 125  
 Glu Thr Leu Gly Ile Ile Leu Gly Ala Phe Ile Ile Cys Trp Leu Pro  
 130 135 140  
 Leu Phe Ile Val Ser Leu Pro Ala Lys Ile Pro Pro Tyr Asp Ile Phe  
 145 150 155 160  
 Ile Leu Leu Ser Phe Phe Phe Phe Phe Phe Leu Ile Pro Ser Leu Thr  
 165 170 175  
 Leu Val Ser Gln Ala Arg Met Gln Trp Tyr Asn Leu Ser Ser Leu  
 180 185 190  
 <210> 185  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens  
 <400> 185

Ile Leu Pro Ala His Leu Ile Pro Leu Gly Lys Leu Trp Cys Cys Leu  
 1 5 10 15  
 Ser Arg Thr Glu Ala Glu Gly Trp Leu Ser Pro Thr Gly Ser Tyr Ser  
 20 25 30  
 Leu Asn Ser Ala Ser Ser Pro Arg Leu Gly Glu Thr Thr Trp Gly His  
 35 40 45  
 Arg Val Phe Ala Arg Cys His Phe Ala Phe Gln Thr Arg Ser Trp Ser  
 50 55 60  
 Ser Gly Phe Arg Leu Gly Leu Trp Asn Ser Gly Ala



Thr Ala Trp Ser Gly Cys Asp Pro Phe Gly Tyr Arg Arg Gly Trp Trp  
 115 120 125  
 Thr Ser Gln Val Gly Arg Ser Ser Leu Asp Glu Arg Pro Arg Thr Ile  
 130 135 140  
 His Arg Arg Ala Gln Glu Ser Leu Leu Ser Pro Ser Asn Ser Thr Glu  
 145 150 155 160  
 Pro Ala Val Asn Cys Trp Leu Leu Pro Val Thr Phe Pro Cys Pro Tyr  
 165 170 175  
 Phe His Ser Leu Glu Ala Ala Arg Thr Thr Ala Gly Trp Pro Trp Pro  
 180 185 190  
 Leu Pro  
 <210> 188  
 <211> 178  
 <212> PRT  
 <213> Homo sapiens  
 <400> 188  
 Ser Phe Ser Leu Gly Asn Phe Val Val Ala Ser Leu Tyr Ser Cys Cys  
 1 5 10 15  
 Phe Asn Asn Phe Val Leu Phe His Ser Phe Thr Val Thr Val Cys Val  
 20 25 30  
 Asp Ser Phe Ser Ser Ser Val Lys Ile Met Ser Pro Glu Ser Ser Phe  
 35 40 45  
 Ile Thr Leu Asp Arg Thr Arg Thr Leu Ser Ile Lys Ser Met Leu Phe  
 50 55 60  
 Val Ile Thr Glu Gln Phe Ser Ala Val Ile Ser Leu Ile Val Thr Phe  
 65 70 75 80  
 Leu Phe Ile Pro Phe Ser Leu Ser Lys Met Pro Leu Phe Val Tyr Trp  
 85 90 95  
 Ser His Arg Ser Glu Ile Cys Glu Phe Ala Ile His Val Ser Tyr Leu  
 100 105 110  
 Phe Ala Asn Gly Phe His Val Ser Lys Ser Leu Phe Ser Ile Val Arg  
 115 120 125  
 Tyr Tyr Leu Tyr Cys Phe Val Gln Asn Ile Asn Leu Val Leu Phe Ile  
 130 135 140  
 Asp Tyr Ser Leu Val Leu Leu Leu Asn Phe Ile Gln Glu Cys Val Phe  
 145 150 155 160  
 Leu Ser Asp Tyr Phe Phe Leu Pro Asn Cys Ile Phe Leu Arg Gly Leu

165

170

175

Ile Ile

&lt;210&gt; 189

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 189

Pro Arg Glu Ala Lys Arg Leu Asp Ile His Ala Pro Leu Leu Ser Leu  
1 5 10 15

Pro Asp Cys His Leu Leu Met Ala Ala Ser Val Ala Tyr Lys Ile Trp  
20 25 30

Arg Pro Leu Gly Ser Val Ser Asn Cys Leu Asn Pro Leu Leu Tyr Phe  
35 40 45

Leu Ser Arg Gly Ala Lys Phe Glu Ser Gly Ser Ser Arg Asn Gly Arg  
50 55 60

Thr Ser Trp Val Ser Ile Gln Leu Gly Gly Arg Asp  
65 70 75

&lt;210&gt; 190

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 190

Ser Leu Val Ile Leu Val Cys Tyr Ser Leu Met Val Arg Ser Leu Ile  
1 5 10 15

Lys Pro Glu Glu Pro His Glu Val Gln Ala Thr Gln Pro Glu Pro Gly  
20 25 30

Pro Ser Gly Thr Ile Leu Leu Val Cys Gly Leu Phe Thr Leu Cys Phe  
35 40 45

Val Pro Phe His Ile Thr Arg Ser Phe Tyr Leu Thr Ile Cys Phe Leu  
50 55 60

Leu Ser Gln Asp Cys Gln Leu Leu Met Ala Ala Ser Val Ala Tyr Lys  
65 70 75 80

Ile Trp Arg Pro Leu Val Ser Val Ser Ser Cys Leu Asn Pro Val Leu  
85 90 95

Tyr Phe Leu Ser Arg Gly Ala Lys Ile Glu Ser Gly Ser Ser Arg Asn  
100 105 110

Gly Arg Thr Ser Trp Val Ser Ile Gln Leu Gly Gly Arg Asp Ala Gln  
115 120 125

Gly Thr Asp Leu Gly Asn Ala Lys Val Lys Leu Gly Lys Asn Glu Leu  
 130 135 140  
 Gln His His Gln Gln Leu Val Cys Thr Gln Met Ser Ala Gly Gly Arg  
 145 150 155 160  
 Gly Ala Gln Asp Leu Leu Lys Val Ser Cys Cys Lys Gly His Phe Tyr  
 165 170 175  
 Ile Asp Val Lys Val Asn Lys Ser Met Glu Arg Ala Thr  
 180 185  
 <210> 191  
 <211> 208  
 <212> PRT  
 <213> Homo sapiens  
 <400> 191  
 Ser His Ile Ser Pro Gly Thr Gly Cys Leu Ser Leu Pro Ala Ile Val  
 1 5 10 15  
 Trp Ala Leu Ala Gly Ser Ser Pro Trp Glu Met Trp Ala Arg His Ser  
 20 25 30  
 Asp Arg Ser Gln Ser Ala Gly Ala Gly Ala Phe Gly Leu Ser Ser Pro  
 35 40 45  
 Met Glu Val Ser Glu Pro His Ser His Ser Tyr Arg Arg His Gln Asn  
 50 55 60  
 Ser Leu Tyr Val Glu Pro His Lys Val Glu Thr Val Asn Ser Cys Arg  
 65 70 75 80  
 Asn Leu Leu Trp Asn Thr Thr Val Phe Glu Ser Gly Ser Asp Leu Thr  
 85 90 95  
 Ser Ser Val Thr Leu Gly Lys Leu Leu Leu Pro Trp Thr Pro Thr Thr  
 100 105 110  
 His Leu Asp Val Gly Asn Asn Asp Thr Glu Phe Ile Gly Leu Arg Leu  
 115 120 125  
 His Leu Met Gly Thr Leu Glu Gln Cys Gln Thr Gln Thr Thr Asn Ala  
 130 135 140  
 Gln Lys Leu Val Phe Ile Ile Ala Phe His Phe Asn Cys Gly Leu Leu  
 145 150 155 160  
 Gly Leu Asn Cys Val Pro Ser Lys Arg Tyr Ile Gly Val Leu Thr Leu  
 165 170 175  
 Ser Thr Ser Glu Cys Asp Cys Thr Trp Arg Leu Gly Leu Tyr Arg Asp  
 180 185 190  
 Asn Arg Val Lys Met Glu Leu Gln Gly Trp Ser Leu Ile Gln Cys Asp

195                                      200                                      205  
 <210> 192  
 <211> 211  
 <212> PRT  
 <213> Homo sapiens  
 <400> 192  
 Ile Leu Ser Ser Ser Leu Cys Leu Arg Pro Pro Ser Pro Glu Pro Ser  
 1                                      5                                      10                                      15  
 Glu Leu Ser Ala Ser Ser Leu Phe Ala Pro Pro Cys Cys Arg His Arg  
 20                                      25                                      30  
 Arg Phe Gly Ser Val Pro Ala Glu Val Gly Lys Asp Thr Trp Asn Ser  
 35                                      40                                      45  
 Gly Arg Pro Leu Cys Ser Pro Leu Ala Arg Ser Lys Ala Val Lys Asp  
 50                                      55                                      60  
 Thr Ala Ser Pro Gly Ser Cys Ser Ser Leu Asn Pro Thr Val Asp Leu  
 65                                      70                                      75                                      80  
 Val Gly Arg Leu Arg Ala Gln Ile Cys Arg Cys Ser Ile Val Ser Ser  
 85                                      90                                      95  
 Val Ser Cys Pro Leu Leu Pro Pro Gly Val Asp Ser Cys Thr Val His  
 100                                      105                                      110  
 Pro Thr Pro Ala Phe Pro Ser Phe Leu Ile Ser Pro Val Ile Phe Pro  
 115                                      120                                      125  
 Val Ala Leu Leu Cys Trp Cys Pro Val Arg Ser Cys Gly His Lys Arg  
 130                                      135                                      140  
 Leu His Gly Pro His Pro Gln Leu Gly Glu Ser Ser Pro Ser Trp Val  
 145                                      150                                      155                                      160  
 Leu Trp Thr Val Lys Lys Asp Gly His Val Gly Ser Val Glu His Glu  
 165                                      170                                      175  
 Val Val Gln Asp Leu Gly Gly His Arg Ser Cys Leu Pro Ala Ser Arg  
 180                                      185                                      190  
 Ala Leu Pro Pro Phe Gly Ser Leu Leu His Leu Gly Lys Arg Phe Val  
 195                                      200                                      205  
 Pro Thr Pro  
 210  
 <210> 193  
 <211> 208  
 <212> PRT  
 <213> Homo sapiens  
 <400> 193

Asn Met Ser Tyr Ser Ser Arg Val Asn Ser Leu Leu Leu Phe Ser Phe  
 1 5 10 15  
 Asn Phe Ser Tyr Ile Ile Phe His Ile Asn Phe Arg Ile Ser Leu Val  
 20 25 30  
 Trp Gly Val Ile Gln Val Asn Leu Ile Lys Phe Gly Glu Gly Phe Thr  
 35 40 45  
 Ile His Leu Ile Asn Phe Gly Arg Val Val Met Leu Met Phe Ser His  
 50 55 60  
 Tyr Ile Leu Lys Cys Asp Ile Ser Phe His Leu Phe Val Leu Asp Gln  
 65 70 75 80  
 Ala Leu Val Ala Ser Ser Glu Asn Leu Leu Asn Ser Arg Asn Asn Phe  
 85 90 95  
 Phe His Leu Leu Thr His Phe Leu Thr Ile Cys Phe Leu Pro Leu Val  
 100 105 110  
 Leu Cys Leu Val Asn Tyr Phe Leu Leu Ile Ser Pro Leu Gln Ile Leu  
 115 120 125  
 Tyr Ala Ile Arg Lys Gly Val Thr Asp Leu Val Ile Glu Thr Gln Tyr  
 130 135 140  
 Thr Phe Val Gly Met Met Lys Ala Leu Gly Ile Phe Ser Tyr Tyr Val  
 145 150 155 160  
 His Leu Ile Ile Leu Lys Leu Ser Ser Tyr Val Glu Pro Ile His Lys  
 165 170 175  
 Ser Arg Ser Phe Asp Phe Lys Ser Cys Ile Phe Pro Tyr Phe Gln Tyr  
 180 185 190  
 Leu Ile Gly Glu Val Thr Cys Asn Ala Ile Val Leu Gln Phe Tyr Ile  
 195 200 205  
 <210> 194  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens  
 <400> 194

Met Thr Gly Asn Ala Val Val Leu Trp Leu Leu Gly Phe Arg Met Arg  
 1 5 10 15  
 Arg Asn Ala Phe Ser Ile Tyr Ile Phe Asn Leu Ser Met Ala Asp Phe  
 20 25 30  
 Leu Phe Leu Arg Ser His Ile Ile Arg Phe Pro Leu Ser Leu Ile Asn  
 35 40 45  
 Ile Leu His Pro Ile Phe Lys Ile Leu Ser Pro Val Met Met Phe Ser



50                      55                      60  
 Tyr Leu Ala Ser Leu Ser Phe Leu Ser Ala Met Ser Thr Glu Arg Cys  
 65                      70                      75                      80  
 Leu Tyr Val Leu Trp Pro Ile Trp Arg Cys Arg Pro Arg Pro Tyr Thr  
                     85                      90                      95  
 Cys Gln Arg Ser Cys Val Ser Cys Ser Gly Pro Cys Leu Cys Cys Gly  
                     100                      105                      110  
 Ala Ser Trp Ser Gly Val Ser Val Thr Ser Cys Leu Val Val Leu Ile  
                     115                      120                      125  
 Leu Phe Gly Val Lys His Gln Ile Ser Ser Gly Gly Phe Phe Tyr Val  
                     130                      135                      140  
 Trp Leu Ser Val Val Pro Ala Trp Ser Cys Trp Ser Gly Ser Phe Val  
 145                      150                      155                      160  
 Gly Pro Gly Arg Cys His Pro Gly Cys Thr Pro Ser Cys Ser Arg Trp  
                     165                      170                      175  
 Ser Ser Ser Phe Cys Gly Leu Pro Phe Gly Ile Arg Phe Phe Leu Phe  
                     180                      185                      190  
 Ser Trp Asn His Val Asp Leu Glu Val Leu Tyr Cys His Val His Leu  
                     195                      200                      205  
 Val Ser Ile Phe Leu  
 210

<210> 195  
 <211> 190  
 <212> PRT  
 <213> Homo sapiens

<400> 195

His Thr His Thr His Thr His Thr His Thr His Thr His Thr Arg Thr  
 1                      5                      10                      15  
 His Pro Ile Asn Gly Phe Pro Gly Gly Arg Ala Ser Val Pro Leu Thr  
                     20                      25                      30  
 Ala Gly Pro Pro Gly Pro Ala Lys Gly Ala Lys Ser His Ser Asp Ile  
                     35                      40                      45  
 Asn Ser Trp Phe Gln Ser Asn Lys Gln Ser Asn Val Arg Lys Val Ile  
                     50                      55                      60  
 Arg Leu Lys Gly Phe Glu Gly Lys Ser His Gln Lys Val Lys Leu Asp  
 65                      70                      75                      80  
 Pro Thr Ser Thr Ser Trp Met Ser Tyr Leu Ile Ser Leu Ala Ser Val  
                     85                      90                      95

Phe Ser Pro Ile Lys Lys Pro Glu Asp Leu Pro His Gln Ala Val Leu  
100 105 110  
Lys Leu Asn Glu Leu Ile Pro Val Gln Ala Glu Asn Ser Ile Tyr Ser  
115 120 125  
Ile Ser Gln Leu Leu Leu Leu Leu Leu Leu Cys Thr Trp Leu Ser  
130 135 140  
Leu Phe Ser Phe Ile Asn Tyr Tyr Ser Leu His Leu Phe Ala Ala Thr  
145 150 155 160  
Trp Ser Ser Trp Asn Pro Phe Thr Ala Tyr Ser Arg Glu Thr Gly Glu  
165 170 175  
Gly Arg Cys His Leu His Ser His Trp Asp Ala Pro Ala Pro  
180 185 190  
<210> 196  
<211> 138  
<212> PRT  
<213> Homo sapiens  
<400> 196  
Glu Asn Leu Phe Phe Lys Gly Lys Phe Val Ser Asn Thr Leu Pro His  
1 5 10 15  
Ser Phe Ile Arg Gln Cys Phe Leu Cys His Phe Ser Ala Arg Ile Leu  
20 25 30  
Leu Leu Gly Ile Glu Phe Thr Val His Ser Ser Val Leu Ser Val Leu  
35 40 45  
Gln Lys Tyr Tyr Leu Phe Pro Ser Asn Leu His Gly Phe Arg Trp Lys  
50 55 60  
Ile Cys Cys Gly Leu His Tyr Cys Phe Ser Val Arg Asn Val Pro Phe  
65 70 75 80  
Phe Leu Cys Leu Leu Ser Arg Phe Leu Ile Phe Phe Phe His Phe Gln  
85 90 95  
Lys Leu Asn Val Phe Gly Cys Ile Leu Phe Arg Val Cys Ser Cys Phe  
100 105 110  
Leu Glu Tyr Leu Gly Leu Cys Ser Ser Ile Leu Ile Trp Glu Gly Ser  
115 120 125  
His Tyr Phe Leu Ile Val Phe Ser His Ile  
130 135  
<210> 197  
<211> 175  
<212> PRT  
<213> Homo sapiens

<400> 197

Ser Asp Ser Pro Ile Tyr Asn Leu Cys His Thr Asn Arg Leu Asn Pro  
1 5 10 15  
His Cys Glu Phe His Thr Cys Val Asp Val Ser Thr Ser Arg Asp Gly  
20 25 30  
Cys Ile Phe Phe Ile Phe Leu His Thr Phe Leu Glu Tyr Phe Ile Ser  
35 40 45  
Met Val Leu Gln Ile Leu Leu Pro Thr Tyr Cys Gly Phe Lys Ala Met  
50 55 60  
Glu Lys Thr Lys Ser His Arg Ser Lys Tyr Cys Arg Lys Gln Asn Ser  
65 70 75 80  
Trp Val Asp Leu Ile Phe Leu Tyr Lys Asn Tyr Gly Tyr Gly Tyr Met  
85 90 95  
Tyr Leu Cys Met Ser Val Ala Lys Ile Asn Lys Met Asn Thr Phe Asn  
100 105 110  
Leu Arg Val Pro Ile Ile Gln Phe Thr Ser Phe Cys Pro Thr Thr Leu  
115 120 125  
Glu Ala Lys Thr Leu Val Glu Thr Leu Met Cys Phe Thr Ser Asn Ser  
130 135 140  
Ser Leu Ala Leu Asn Ile Pro Leu Phe Val His Pro Leu Ser Asp Ala  
145 150 155 160  
Ile Leu Leu Val Lys Gln Gln Thr Ser Thr His Arg Lys Leu Glu  
165 170 175

<210> 198

<211> 177

<212> PRT

<213> Homo sapiens

<400> 198

Ser Arg Lys Gly Arg His Trp Arg Gly Cys Leu Leu Thr Leu Leu Met  
1 5 10 15  
Leu Val Ala Val Val Val Cys Phe Ser Pro Tyr His Leu Asn Ile Lys  
20 25 30  
Gln Phe Met Ala Arg Gly Met Leu His Leu Pro Ser Cys Ala Glu Arg  
35 40 45  
Arg Ala Phe Leu Leu Ser Leu Gln Ala Thr Val Ala Leu Met Asn Met  
50 55 60  
Asn Cys Gly Ile Thr Pro Ser Phe Thr Ser Leu His Pro Pro Ile Thr  
65 70 75 80

Gly Asn Gly Ser Trp Ala Phe Ser Ser Lys Gly Leu Pro Pro Pro Pro  
85 90 95

Pro Pro Pro Pro Pro Gln Glu Lys Leu Leu Gln Lys His Gln Val Ser  
100 105 110

Pro Arg Pro Glu Val Leu Cys Ser Arg Ser Thr Trp Ser Asn Val Ser  
115 120 125

Phe Ala Leu Leu Tyr Leu Gly Arg Gly Pro Ala Leu Gly Tyr Ser Tyr  
130 135 140

Asn Leu Gly Lys Arg Phe Phe Lys Glu Lys Asn Thr Glu Glu Ile Gln  
145 150 155 160

Asn Ala Gly Arg Gly Gly Ser Arg Leu Ser Pro His Phe Gly Arg Pro  
165 170 175

Arg

<210> 199  
<211> 202  
<212> PRT  
<213> Homo sapiens

<400> 199

Val Tyr Glu Cys Tyr Ile Phe Gly His Cys Trp Asp Val Ala Ser His  
1 5 10 15

His Leu Thr Ser Leu Asn Leu Ser Gly Leu Thr Cys Glu Met Gly Ala  
20 25 30

Leu Thr Phe Thr Cys Leu Gln Ala Cys Ser Gln Ile Arg Cys His Leu  
35 40 45

Lys Asp Phe Ser Ser Pro Gly Asp Phe Lys Arg Leu Leu Arg Gly His  
50 55 60

Phe Phe Ser Gly Cys Gly Arg Ser Met Ile Arg Val Ile Arg Met Gly  
65 70 75 80

Leu Leu Glu Glu Arg Gly Gly Gln Arg Leu Leu Phe His Phe Met Ala  
85 90 95

Pro Ser Gly Gln Arg Thr Asp Ser Ala Thr Ala Ala Thr Arg Ala Leu  
100 105 110

Pro Gly Leu Trp Ser Gln Leu Ser Gln Gln Glu Phe Gln Lys Ala Lys  
115 120 125

Gly Ser Glu Leu His Pro Ser Phe Leu Ala Asp Cys His Pro Ala Ser  
130 135 140

Ser His Ser Pro Gln Gly Tyr Val Met Leu Ala Leu Lys Ala Ser Leu  
145 150 155 160

Gly Arg Gly Cys Ile Cys His Pro Leu Pro Cys Lys Ile Phe Glu Val  
165 170 175

Gln Arg Ala Leu Gln Ala Glu Pro His Pro Leu Leu His Ser Pro Ser  
180 185 190

Val Gly Met His Ser Pro Ser Val Gly Met  
195 200

<210> 200

<211> 175

<212> PRT

<213> Homo sapiens

<400> 200

Leu Pro Pro Pro Ile Leu Val Pro Thr Val Val Thr Glu Glu Ile  
1 5 10 15

Phe Ser Ser Ser Thr Ala Thr Leu Lys Gly Pro Ser Val Pro Phe Gly  
20 25 30

Gly Leu Gly Ile Asp Leu Pro His Arg Ser Ser Leu Ala Pro Met His  
35 40 45

Thr Phe Arg Asp Leu Arg Thr Gly Pro Leu Cys Leu Pro Leu Ser Leu  
50 55 60

Leu Val Arg Lys Asp Trp Pro Ala Cys Leu His Pro Gln Gln Ser Ile  
65 70 75 80

Ala Thr Ala Pro Ser Cys Ala Thr Glu Glu Leu Thr Asp Thr Thr His  
85 90 95

Thr Val Tyr Ser Arg Arg Asn Pro Met Gly Pro Ile Ile Leu Cys Pro  
100 105 110

Pro Trp Ile Lys Thr Lys Val Leu Tyr Ala Thr Asn Thr Thr Ala Ile  
115 120 125

Ser Thr Gly Lys Ser Leu Ser Leu Gln Lys Pro Ile Gln Lys Pro Arg  
130 135 140

Arg Ser Asn Cys His Thr Lys Tyr Thr Asp Thr Asn Leu Arg Thr Glu  
145 150 155 160

Thr Glu Asn Lys Glu Thr Trp His Phe Leu Lys Glu His Asn Asn  
165 170 175

<210> 201

<211> 178

<212> PRT

<213> Homo sapiens

<400> 201

Leu Gly Phe Leu Leu Thr Asp Val Gln Ser Val Phe Gly Tyr Leu Gln  
 1 5 10 15  
 His Glu Thr His Tyr Cys Ser Ala Thr Ile Gly Arg His Trp Pro Ala  
 20 25 30  
 His Pro Leu Met Arg Cys Trp Asn Pro Phe Phe Ile Leu Lys Tyr Leu  
 35 40 45  
 Ile Asp Lys Asn Cys Val Cys Ser Arg Cys Asp Val Met Leu Arg Ser  
 50 55 60  
 Arg Tyr Ile Gln Val Tyr Leu Pro Gln Ser Asn Leu Thr Asn Leu Ser  
 65 70 75 80  
 Pro Pro Met Ile Thr Ile Met Leu Arg Gly Gly Ser Glu Asp Thr Lys  
 85 90 95  
 Asp Leu Leu Ser Tyr Gln Ile Ser Ser Gln Gln Tyr Ser Ile Ile Asn  
 100 105 110  
 Thr Val Thr Met Leu Cys Ile Arg Ser Pro Glu His Val Thr Glu Gly  
 115 120 125  
 Leu Tyr Leu Leu Thr Asn Ile Ser Pro Ala Leu His Glu Trp Met Val  
 130 135 140  
 Ser Ile Phe Gln Thr His Ser Glu Asp Phe Ala Trp Leu Ala Thr Ser  
 145 150 155 160  
 Ile Ser Pro Glu Lys Val Gln Lys Ser Arg Pro Ser His Arg Asn Ser  
 165 170 175

Asp Ala

<210> 202  
 <211> 196  
 <212> PRT  
 <213> Homo sapiens

<400> 202

Tyr Gly Ala Leu Tyr Lys Tyr Lys Gln Gln Ser Leu Thr Phe Leu Ser  
 1 5 10 15  
 Leu Gln Leu Leu Thr Leu Ala Gly Ser Arg Ile Lys Met Pro Asn Ser  
 20 25 30  
 Thr Gln Lys Pro Trp Pro Val Ser Leu Pro Lys Met Glu Phe Arg Leu  
 35 40 45  
 Thr Ala Gly Asn Arg Asn Cys Ser Phe Lys Ala Ile Ala Trp Ala Met  
 50 55 60  
 Val Pro Ile Phe Val Asn Ile Gly Phe Cys Leu Asn Ser Val Ser Arg  
 65 70 75 80

Val Asp Tyr Ile Ile Cys Lys Val Cys Lys Met Lys Val Trp Gly Ser  
85 90 95  
Ser Ser Lys Tyr Lys Gln Lys Val Leu Leu Ser Val Ser Lys Tyr Lys  
100 105 110  
Met Phe Pro Leu Ser Val Ile Tyr Phe Ser Thr Cys Tyr Val Phe Gln  
115 120 125  
Phe Val Cys Phe Val Phe Pro Leu Leu Phe Tyr Val Leu Leu Cys Lys  
130 135 140  
Lys Ile Lys Asn Leu Asn Tyr His Asn Lys Phe Ser His Ser Phe Leu  
145 150 155 160  
Cys Cys Ala Val Ser Ile Asn Ala Asn Ile Lys Ala Phe Asn Leu Tyr  
165 170 175  
Ile Glu Ser Gln Lys Leu His Asn Thr Tyr Phe Ile Val Cys Thr Cys  
180 185 190  
Met Tyr Ile Leu  
195  
<210> 203  
<211> 212  
<212> PRT  
<213> Homo sapiens  
<400> 203  
Ser Gly Val Ile Asn Leu Leu Tyr Ile Cys Val Tyr Val Cys Ile Phe  
1 5 10 15  
Leu Pro Asn Arg Cys Asn Thr Lys Tyr Ser His Gly Val Ile Thr Phe  
20 25 30  
Ser Gln Leu Thr Leu His Pro Tyr Ile Ile Glu Glu Arg Ser Thr Ser  
35 40 45  
Ile Leu Phe Leu Leu Val Ile Ala Leu Met Ser Glu Tyr Lys Leu Asp  
50 55 60  
Ser Ser Val Ala Asn Asn Thr Arg Gln Ser Lys Asp Phe Ser Cys Cys  
65 70 75 80  
Arg His Ile Phe Leu Ile Tyr Trp Lys His Lys Cys Val Pro Pro Asn  
85 90 95  
Phe Ile Val Asp Arg Asn Met Lys Asn Phe Ile Lys Leu Lys Thr Gly  
100 105 110  
Ser Leu Pro Asp Leu Pro Val Ile Leu Pro Thr Leu Gln Ile His Pro  
115 120 125  
Ile Val Pro Ala Ser Phe Thr Met Lys Lys Tyr Glu Thr Cys Leu Thr

130                      135                      140  
 Trp Ser Leu Cys Leu Arg Glu Thr Cys Val Cys Leu Trp Asn Thr Leu  
 145                      150                      155                      160  
 Thr Lys Ile Pro Ala Leu Val Asp Lys Thr Gly Phe Gln Ser Ser Leu  
 165                      170                      175  
 Asn Ser His Phe Val Leu Asn Lys Val Val Ser Lys Thr Arg Cys Ser  
 180                      185                      190  
 Lys Tyr Tyr Cys Ser Asp Ala Ile Ser Lys Thr Val Leu Ile Pro Cys  
 195                      200                      205  
 Gly Arg Glu Asn  
 210  
 <210> 204  
 <211> 172  
 <212> PRT  
 <213> Homo sapiens  
 <400> 204  
 Asn Lys Ile Val Phe Ile Phe Ser His Asp Cys Leu Trp Arg Lys Ile  
 1                      5                      10                      15  
 Ser Lys Asn Leu Pro Lys Thr Asn Ala Ile Leu Ser Arg Val Lys Glu  
 20                      25                      30  
 Thr Arg Ser Ser Leu Phe Cys Thr Leu Tyr Phe Cys Ile Ser Val Leu  
 35                      40                      45  
 Phe Leu Tyr Gly Ser Asn Asp Gln Leu Glu Ile Lys Ile Leu Lys Gln  
 50                      55                      60  
 His Gln Lys His Lys Met Leu Ser Tyr Lys Ser Asn Lys Thr Tyr Thr  
 65                      70                      75                      80  
 Asp Ser Val Pro Lys Thr Val Asn Val Tyr Leu Lys Asn Gln Arg Arg  
 85                      90                      95  
 Ala Glu Gln Arg Ala Thr Ser Cys Leu Leu Leu Glu Asn Ser Ile Glu  
 100                      105                      110  
 Leu Arg Tyr Lys Phe Pro Gln Ser Asp Leu Asp Ala Thr Gln Phe His  
 115                      120                      125  
 Ser Asn Pro Ser Arg His Phe Leu Leu Lys Ser Thr Ser Cys Phe Ile  
 130                      135                      140  
 His Thr Lys Ile His Lys Asn Lys Lys Ala Lys Ile Leu Leu Lys Glu  
 145                      150                      155                      160  
 Asn Lys Phe Arg Arg Leu Leu Leu Ser Asp Phe Arg  
 165                      170



<210> 205  
 <211> 313  
 <212> PRT  
 <213> Homo sapiens

<400> 205

Val	Pro	Lys	Ile	Phe	Ser	Phe	Ser	Ser	Ser	Phe	Gln	Asn	Tyr	Phe	Leu	1	5	10	15
Ile	Leu	Val	Lys	His	Thr	Ser	Ser	Asn	Ile	Thr	Tyr	Tyr	Leu	Val	Phe	20	25	30	
Thr	Tyr	Ile	Thr	His	Ser	Leu	Asn	Lys	Phe	Val	Glu	Met	Ile	Ile	Leu	35	40	45	
Lys	Ile	Leu	Val	Phe	Lys	Phe	Met	Ser	Ser	Gln	Lys	Leu	Leu	Pro	Arg	50	55	60	
Ile	Ser	Ile	Leu	Asn	Ile	Trp	Ile	Asn	Ile	Leu	Phe	Tyr	Thr	Pro	Tyr	65	70	75	80
Asn	Ile	Leu	Leu	Ala	Ile	Ile	Ile	Phe	Phe	Arg	Ile	Cys	Ser	Thr	Ser	85	90	95	
Asn	Phe	Phe	Asp	Phe	Leu	Ile	Leu	Lys	Arg	Ile	Ile	Tyr	Ala	Asn	Gln	100	105	110	
Gln	Cys	Lys	Asp	Phe	Ser	Trp	Phe	Thr	Arg	Val	Lys	Leu	Phe	Ser	Arg	115	120	125	
Met	Val	Gly	Ser	Phe	Ala	Tyr	Ile	Lys	Leu	Met	Tyr	Arg	Ser	Ala	Ser	130	135	140	
Ser	His	Ile	Lys	Val	Gln	Ser	Leu	Leu	Lys	Lys	His	Phe	Ile	Ser	Asn	145	150	155	160
Gln	Phe	Val	Phe	Leu	Tyr	Thr	Leu	Lys	Pro	Phe	Asn	Cys	Phe	Tyr	Phe	165	170	175	
Ser	Ile	Leu	Thr	Ser	Ile	Ser	Cys	Tyr	Ser	Gln	Trp	Pro	Ala	Ser	Ser	180	185	190	
Leu	Ala	Ile	Arg	Gln	Leu	Phe	Val	Tyr	Leu	Ala	Lys	Tyr	Ile	His	Ala	195	200	205	
Leu	Lys	Ile	Pro	Phe	Pro	Asn	Ile	Tyr	Tyr	Asp	Phe	Phe	Lys	Gly	Phe	210	215	220	
Ser	Phe	Val	Thr	Met	Thr	Leu	Lys	Ala	Lys	Val	Ser	Arg	Cys	Cys	Ile	225	230	235	240
Thr	Val	Gly	Ser	Thr	Ile	Met	Tyr	Gln	Glu	Gly	Arg	Glu	Asn	Gln	Gly	245	250	255	
Thr	Phe	Leu	Trp	Glu	Tyr	Pro	Ile	Ile	Cys	Gln	Ile	Tyr	Ser	Asn	Ser	260	265	270	

Leu Arg Thr Ile Thr Phe Val Phe Thr Val Phe Pro Met Gln Phe Leu  
 275 280 285

Arg Phe Ile Phe Lys Asn Phe Leu Gly Glu Met Asp Tyr Ser Leu Leu  
 290 295 300

Ser Ala Val Ile His Asn Phe Tyr Phe  
 305 310

<210> 206

<211> 318

<212> PRT

<213> Homo sapiens

<400> 206

Pro Phe Tyr Tyr Ser Met Leu Val Pro Thr Ser Gly Leu Ser Thr Cys  
 1 5 10 15

Cys Ser Phe Cys Leu Glu Ser Ser Ser Pro Asp Leu Leu Arg Phe Pro  
 20 25 30

Leu Ser Ile Arg Val Ser Ala Val Ile His Pro Gln Arg Arg Ser Pro  
 35 40 45

Asp Pro Val Lys Pro Pro Ile Pro Gln Ser Pro Tyr Val Ser Thr Ser  
 50 55 60

Leu Tyr Leu Ile Ser Gln His Leu Leu Ile Ser Leu Thr Leu His Tyr  
 65 70 75 80

Met Cys Cys Tyr Met Phe Val Ile Leu Ser Ser Gly Pro Cys Asn Val  
 85 90 95

Arg Met Ala Gln Tyr Lys Trp Gln Glu Gly Cys Arg Gly Val Asp Lys  
 100 105 110

Ala Glu Ser Gly Trp Gly Ser Trp Arg Asp Gly Gln Gly Pro Glu Leu  
 115 120 125

Arg Arg Trp Tyr Leu Gln Cys Ala Leu Asn Cys Pro Gly Met Ile Ile  
 130 135 140

Ser Ile Ala Ser Phe His Ser Gln Arg Cys Pro Gly Tyr Tyr Ser Cys  
 145 150 155 160

Ser Val Tyr Arg Ala Trp Ala Val Gly Ile Leu Phe Gln Met Gly Cys  
 165 170 175

Glu Ala Cys Gly Trp Phe Ala Gly Ser Asp Met Ile Leu Ala Phe Lys  
 180 185 190

Asp His Asp Gln Val Leu Glu Thr Leu Phe Trp Leu Leu Pro Thr Pro  
 195 200 205

Pro His Thr His Pro Thr Leu Leu His Cys Pro Phe Ser Leu Leu Trp

210	215	220
Gln Leu Phe Leu Phe Tyr Asn Leu Ile Leu Glu Phe Leu Gln Thr Ser		
225	230	235 240
Gly Ser Gln Leu Gly Ala Ile Ser Pro Pro Arg Asp Ile Trp Tyr Phe		
	245	250 255
Ile Trp Arg Tyr Phe Trp Ser Gln Leu Glu Arg Val Leu Ala Ser Ser		
	260	265 270
Gly Arg Pro Gly Arg Leu Leu Thr Ile Leu Gln Ser Thr Glu Gln Pro		
	275	280 285
Tyr Thr Ile Lys Asn Asp Leu Thr Gln Asn Ala Ser Ser Pro Glu Val		
	290	295 300
Lys Lys Pro Cys Thr Arg Leu Ala Pro Ser Asn Arg Asn Ile		
305	310	315
<210> 207		
<211> 318		
<212> PRT		
<213> Homo sapiens		
<400> 207		
Ile Ser Pro Phe Tyr Tyr Ser Met Leu Val Pro Thr Ser Gly Leu Ser		
1	5	10 15
Thr Cys Cys Ser Phe Cys Leu Glu Ser Ser Ser Pro Asp Leu Leu Arg		
	20	25 30
Phe Pro Leu Ser Ile Arg Val Ser Ala Val Ile His Pro Gln Arg Arg		
	35	40 45
Ser Pro Asp Pro Val Lys Pro Pro Ile Pro Gln Ser Pro Tyr Val Ser		
	50	55 60
Thr Ser Leu Tyr Leu Ile Ser Gln His Leu Leu Ile Ser Leu Thr Leu		
65	70	75 80
His Tyr Met Cys Cys Tyr Met Phe Val Ile Leu Ser Ser Gly Pro Cys		
	85	90 95
Asn Val Arg Met Ala Gln Tyr Lys Trp Gln Glu Gly Cys Arg Gly Val		
	100	105 110
Asp Lys Ala Glu Ser Gly Trp Gly Ser Trp Arg Asp Gly Gln Gly Pro		
	115	120 125
Glu Leu Arg Arg Trp Tyr Leu Gln Cys Ala Leu Asn Cys Pro Gly Met		
	130	135 140
Ile Ile Ser Ile Ala Ser Phe His Ser Gln Arg Cys Pro Gly Tyr Tyr		
145	150	155 160

Ser Cys Ser Val Tyr Arg Ala Trp Ala Val Gly Ile Leu Phe Gln Met  
 165 170 175  
 Gly Cys Glu Ala Cys Gly Trp Phe Ala Gly Ser Asp Met Ile Leu Ala  
 180 185 190  
 Phe Lys Asp His Asp Gln Val Leu Glu Thr Leu Phe Trp Leu Leu Pro  
 195 200 205  
 Thr Pro Pro His Thr His Pro Thr Leu Leu His Cys Pro Phe Ser Leu  
 210 215 220  
 Leu Trp Gln Leu Phe Leu Phe Tyr Asn Leu Ile Leu Glu Phe Leu Gln  
 225 230 235 240  
 Thr Ser Gly Ser Gln Leu Gly Ala Ile Ser Pro Pro Arg Asp Ile Trp  
 245 250 255  
 Tyr Phe Ile Trp Arg Tyr Phe Trp Ser Gln Leu Glu Arg Val Leu Ala  
 260 265 270  
 Ser Ser Gly Arg Pro Gly Arg Leu Leu Thr Ile Leu Gln Ser Thr Glu  
 275 280 285  
 Gln Pro Tyr Thr Ile Lys Asn Asp Leu Thr Gln Asn Ala Ser Ser Pro  
 290 295 300  
 Glu Val Lys Lys Pro Cys Thr Arg Leu Ala Pro Ser Asn Arg  
 305 310 315  
 <210> 208  
 <211> 320  
 <212> PRT  
 <213> Homo sapiens  
 <400> 208  
 Lys Leu Thr Leu Ala Ala Tyr Thr Leu Ile Gln Cys His Leu Pro Cys  
 1 5 10 15  
 Val Ile His Asn Ile Leu Tyr Glu Ser Tyr Phe Leu Cys Val Cys Val  
 20 25 30  
 Pro Phe Phe Glu Glu Tyr Asp Leu Ser Gln Phe Phe Cys Phe Ser Leu  
 35 40 45  
 Ser Pro Phe Asn Ile Ser Arg Ala Phe Val Val Val Thr Gly Glu Thr  
 50 55 60  
 Thr Tyr Thr Ser Phe Leu Leu Leu Phe Cys Tyr Leu Gln Phe Cys Met  
 65 70 75 80  
 Thr Leu Lys Gln Lys Asn Asn Tyr Leu Thr Ile Ser Phe Val Leu Tyr  
 85 90 95  
 Ser Gly Phe His Ile Gln Ser Pro Phe Ile Met Leu Leu Pro Leu Phe  
 100 105 110

Ser Ser Val Phe Glu Asp Gly Lys Ile His Gln His Pro Lys Tyr Gln  
 115 120 125  
 Pro Glu Arg Lys Lys Glu Ser Gly Trp Arg Gln Asp Ser Phe Gln Ser  
 130 135 140  
 Ile Ser Ser Thr Asp His Gly Ala Ala Ala Lys Arg His Ser Lys Arg  
 145 150 155 160  
 Val Glu Arg Gly Lys Thr Ser Ser Leu Arg Cys Leu Pro Phe Lys Phe  
 165 170 175  
 Thr Ile Ile Ile Arg Met Leu Leu Glu Glu Glu Gln Gly Gln Gly His  
 180 185 190  
 Phe Cys Asn Met Thr Gln Lys Asn Ile Asp Leu Lys Phe Asp Thr Tyr  
 195 200 205  
 Glu Leu Ser Lys Cys Arg Glu Lys Leu Pro Pro Cys Cys Thr Cys Met  
 210 215 220  
 Cys Ala Ile His Phe Ile Leu Ile Lys Val Cys Lys His Glu Met Gln  
 225 230 235 240  
 Gly Thr Asp His Leu Phe Met Arg Met Gln His Ser Ser Glu Lys Val  
 245 250 255  
 Tyr Leu Pro Lys Thr Glu Tyr Met Phe Ile Leu Lys Phe Phe Phe Leu  
 260 265 270  
 Phe Leu Phe Leu Ile Val Ile Lys Tyr Lys His Lys Phe Thr Ile Leu  
 275 280 285  
 Ile Ile Phe Lys Tyr Thr Val Gln Tyr Val His Ser His Tyr Cys Ala  
 290 295 300  
 Thr Asn Phe Gln Asn Ser Phe Tyr Leu Ala Lys Met Lys Leu Tyr Thr  
 305 310 315 320

<210> 209

<211> 315

<212> PRT

<213> Homo sapiens

<400> 209

Gln Pro Phe Ser Met His Ser Leu Glu Glu Lys Phe Phe Phe Phe Leu  
 1 5 10 15  
 Asn His Tyr Ser Ala Thr Ser Ile Ser Leu Glu Phe Leu Ser Ser Glu  
 20 25 30  
 Thr Leu Val Gln Val Ser Trp Gly Ile Arg Ile Val Cys Val Trp Ile  
 35 40 45  
 Thr Lys Tyr Tyr Arg Leu Arg Gly Glu Glu Thr Leu Trp Ser Phe Arg

50	55	60
Pro Thr Leu Ile Cys Leu Asp Leu Phe Cys Phe Lys Glu Ser His Leu		
65	70	75 80
Gln Arg Thr Ala Ser Asp Ser Pro Cys Ser Val Phe Ser Gln Glu Cys		
	85	90 95
Ser Leu His Gln Pro Gln Glu Val Leu Gln Lys Glu Val Phe His Val		
	100	105 110
Gln Ile Thr Leu Arg Ser Asn Ser His His Ile Asp Phe Glu Tyr Ser		
	115	120 125
Cys Arg Lys Thr Cys Leu Tyr Gln Leu Gly Val Ser Pro Asn Leu Phe		
	130	135 140
Gly His Gly Asn Ser Phe Ser Lys Lys Thr Cys Phe Ser Ile Ser Phe		
	145	150 155 160
His Arg Lys Leu Thr Val Val Cys Val Phe Phe Gln Ile Ile His Ile		
	165	170 175
Tyr Ser Lys Leu Lys Leu His Trp Leu Phe Gly Phe Ile Asn Pro Leu		
	180	185 190
Thr Ser Val Leu Phe Phe Ser Thr Thr Cys Cys Leu Ala Thr Ser Ala		
	195	200 205
Cys Phe Val Trp Leu Asp Phe Leu Val Leu Ser Ile Gly Leu Arg Phe		
	210	215 220
Tyr Ile Leu Ser Cys Trp Asn His Pro Thr Ser Pro Ala Trp Leu Phe		
	225	230 235 240
Gly Ser Arg Leu Ser His Leu Val His Ser Ser Ala Val Asp Leu Tyr		
	245	250 255
Tyr Ser Leu Met Ser Ala Tyr Ser Leu His Leu Tyr Ser Phe Cys Leu		
	260	265 270
Glu Met Met Ser Arg Thr Gly Gln Gly Trp Tyr His Ser Ile Asn His		
	275	280 285
His Pro Leu Ile Leu Thr Val Asn Leu Pro Asn Lys Ile Phe Gln Lys		
	290	295 300
Arg Val Ser Asn Asn Pro Cys Leu Pro Leu Trp		
305	310	315
<210>	210	
<211>	327	
<212>	PRT	
<213>	Homo sapiens	
<400>	210	

Arg	Val	Pro	Ser	Leu	Pro	Gly	Pro	Pro	Ala	Thr	Val	Cys	Pro	Val	Pro	1	5	10	15
Ala	Ser	Glu	Phe	Ser	Gln	His	Arg	Lys	Arg	Gly	Leu	Arg	Thr	Ile	Gln	20	25	30	
Pro	Val	His	Ser	Arg	Glu	Ser	Leu	Ser	Val	Ser	Gln	Arg	Leu	Met	Gly	35	40	45	
Cys	Leu	Trp	Cys	Arg	Val	Thr	Pro	Ala	Ser	Pro	Cys	Gly	Gly	Cys	Ala	50	55	60	
Gly	Gly	Ala	Arg	Pro	Pro	Pro	Cys	Ala	Leu	Ser	Leu	Ala	Gln	Gly	Gln	65	70	75	80
His	Thr	Ala	His	Pro	Leu	Phe	Phe	Leu	Pro	Phe	Pro	Leu	Ala	Gln	Pro	85	90	95	
Leu	Val	Val	Gly	Val	Thr	Arg	Gly	Ala	Glu	Arg	Ser	Trp	Arg	Ser	Arg	100	105	110	
Ala	Cys	Pro	Gly	Pro	Val	Arg	Glu	Gly	Gly	Arg	Gly	Gln	Gln	His	Pro	115	120	125	
Trp	Arg	Arg	Glu	Asp	Tyr	Ile	Ile	Phe	Ile	Tyr	His	Met	Pro	Lys	Ile	130	135	140	
Ala	Leu	Leu	Arg	Ala	Phe	Asp	Ile	His	Pro	Lys	Ile	Phe	Lys	His	Tyr	145	150	155	160
Gly	Ser	Met	Ser	Gly	Cys	Ile	Ser	Asn	Met	Lys	Val	Glu	Ala	Ser	Cys	165	170	175	
Pro	Ala	Pro	Ser	Pro	Leu	Trp	Glu	Asn	Phe	Val	His	Val	Leu	Ser	Gln	180	185	190	
Leu	Phe	Gly	Lys	Gly	Gly	Pro	Ser	His	Cys	Pro	Leu	Gly	Gly	Phe	Asp	195	200	205	
Val	His	Cys	Val	Gly	Arg	Ser	Leu	Pro	Ser	Ile	Leu	Phe	Tyr	Phe	Cys	210	215	220	
Arg	Ile	Ser	Ala	Gln	Ser	Gly	Ser	Ala	Trp	Gln	Phe	Ser	Cys	Ser	Ala	225	230	235	240
Arg	Glu	Val	Leu	Cys	Pro	Gly	Leu	Cys	Asp	Phe	Arg	Arg	Arg	Glu	Gly	245	250	255	
Ser	Cys	Arg	Pro	Tyr	Leu	Gln	Trp	Leu	Pro	Pro	Gly	Ile	Pro	Val	Cys	260	265	270	
Ser	Leu	Cys	Thr	Val	Gln	Arg	Arg	Ser	Gly	Ser	Trp	Trp	Arg	Asp	Gly	275	280	285	
Asp	Pro	Arg	Thr	Met	Ala	Ser	Thr	Lys	Ala	Gly	Gly	Ala	Cys	Asp	Arg	290	295	300	

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 Arg Glu Gly Ala His Pro Gly  
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 Ser Leu Pro Gly Pro Pro Ala Thr Val Cys Pro Val Pro Ala Ser Glu  
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 Phe Ser Gln His Arg Lys Arg Gly Leu Arg Thr Ile Gln Pro Val His  
 35 40 45  
  
 Ser Arg Glu Ser Leu Ser Val Ser Gln Arg Leu Met Gly Cys Leu Trp  
 50 55 60  
  
 Cys Arg Val Thr Pro Ala Ser Pro Cys Gly Gly Cys Ala Gly Gly Ala  
 65 70 75 80  
  
 Arg Pro Pro Pro Cys Ala Leu Ser Leu Ala Gln Gly Gln His Thr Ala  
 85 90 95  
  
 His Pro Leu Phe Phe Leu Pro Phe Pro Leu Ala Gln Pro Leu Val Val  
 100 105 110  
  
 Gly Val Thr Arg Gly Ala Glu Arg Ser Trp Arg Ser Arg Ala Cys Pro  
 115 120 125  
  
 Gly Pro Val Arg Glu Gly Gly Arg Gly Gln Gln His Pro Trp Arg Arg  
 130 135 140  
  
 Glu Asp Tyr Ile Ile Phe Ile Tyr His Met Pro Lys Ile Ala Leu Leu  
 145 150 155 160  
  
 Arg Ala Phe Asp Ile His Pro Lys Ile Phe Lys His Tyr Gly Ser Met  
 165 170 175  
  
 Ser Gly Cys Ile Ser Asn Met Lys Val Glu Ala Ser Cys Pro Ala Pro  
 180 185 190  
  
 Ser Pro Leu Trp Glu Asn Phe Val His Val Leu Ser Gln Leu Phe Gly  
 195 200 205  
  
 Lys Gly Gly Pro Ser His Cys Pro Leu Gly Gly Phe Asp Val His Cys  
 210 215 220  
  
 Val Gly Arg Ser Leu Pro Ser Ile Leu Phe Tyr Phe Cys Arg Ile Ser  
 225 230 235 240



Ala Gln Ser Gly Ser Ala Trp Gln Phe Ser Cys Ser Ala Arg Glu Val  
 245 250 255  
 Leu Cys Pro Gly Leu Cys Asp Phe Arg Arg Arg Glu Gly Ser Cys Arg  
 260 265 270  
 Pro Tyr Leu Gln Trp Leu Pro Pro Gly Ile Pro Val Cys Ser Leu Cys  
 275 280 285  
 Thr Val Gln Arg Arg Ser Gly Ser Trp Trp Arg Asp Gly Asp Pro Arg  
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 Thr Met Ala Ser Thr Lys Ala Gly Gly Ala Cys Asp Arg Arg Trp Thr  
 305 310 315 320  
 Met Thr Gln Val Pro Ala Arg  
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 Gln Arg Asn Ile Glu Phe Lys Tyr Leu Glu Gln Met Ser Glu Ile Ser  
 35 40 45  
 His Lys Asn Leu Asn Arg Asn Trp Pro Ser Lys Ser Trp Glu Phe Gly  
 50 55 60  
 Asp Ala Asn Phe Ile Leu Ser Ile Leu Glu Gln Ser Lys Ile Asn Thr  
 65 70 75 80  
 Thr His Phe Ser Leu Arg Lys Ser Ala Tyr Leu Phe Asp Val Pro Ser  
 85 90 95  
 Gly Leu Glu Ile Pro Asn Lys Thr Leu Thr Leu Phe Ile Leu His His  
 100 105 110  
 Asn Ile Thr Val Asn Lys Asn Asn Leu Asn Leu Cys Ser Asn Phe Pro  
 115 120 125  
 Leu Trp Thr Gln Arg Lys Thr Gln Glu Lys Met Val Glu Cys Val Leu  
 130 135 140  
 Asn Lys Val His Tyr Leu Tyr Gln Lys Tyr Ala Val Ile Ser Thr Ser  
 145 150 155 160  
 Thr Pro Lys Cys Leu Phe Asn Phe Ala Met Met Tyr Lys Ile Leu Val

	165		170		175
Thr Cys Gln Ser Ile Asn Phe Ser Gln Leu Ile Leu Lys Ala Glu Asp					
	180		185		190
Ser His His Phe Val Cys Phe Ser Val Asn Met Ile Val Phe Val Arg					
	195		200		205
Lys His Ile Tyr Pro Glu Ser Tyr Gly Pro Met Phe Leu Thr Phe Cys					
	210		215		220
Pro Arg Ser Val Cys Val Ala Ser Cys Val Cys Met Asp Val Asp Asn					
	225		230		235
Lys Leu Asp Ser Tyr Gln Glu Ser Lys Ile Lys Leu Leu Ser Cys Lys					
		245		250	255
Lys Phe Val Lys Tyr Val Asp Leu Ser Cys Leu Lys Leu Arg His Pro					
	260		265		270
Gly His Ser Leu Trp Arg Glu Asn Ser Pro Pro Leu His Val Asn Leu					
	275		280		285
Trp Val Gly Thr Gly Val Gln Gly Phe Arg Val Gly Leu Leu Leu Pro					
	290		295		300
Gly Met Ile Gln Lys Ile					
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	20		25		30
Thr Glu Glu Gly Gly Ser Leu Ile Phe Pro His Leu Val Thr Pro Met					
	35		40		45
Leu Glu Leu His Glu Ile Asp Asn Tyr Tyr Tyr Ile Val Ile Ser Phe					
	50		55		60
His Val Leu Ser Phe Ser Ser Ser Leu Leu Leu Phe Phe Lys Ser Arg					
65		70		75	80
Lys Gln Asn Gly His Gln Leu His Glu His Cys Ser Lys Lys Ile Thr					
	85		90		95
Val Arg Pro Asn Leu Asn Cys Trp Leu Pro Gly Arg Ala Ile Leu Ile					
	100		105		110

Ala Tyr Lys Asp Gln Ile Lys Tyr Gln Ser Gln Val Val Arg Cys Pro  
 115 120 125  
 Cys Thr Glu His Asn Ile Val Tyr Lys Asp Val Glu Leu Leu Leu Leu  
 130 135 140  
 Leu Trp Phe Tyr Thr Val Ala His Asp Lys Glu Leu Ile Phe Tyr Leu  
 145 150 155 160  
 Asn Glu Val Leu Phe Tyr Ile Thr Tyr Phe Met Phe Phe Pro Gln Glu  
 165 170 175  
 Ser Phe Asn Leu Leu Arg Leu Arg Asp Ser Phe Lys Cys Phe Asp Pro  
 180 185 190  
 His Thr Leu Phe Ala Gly Cys Arg Arg Met Cys Met Ile Leu Thr Phe  
 195 200 205  
 Thr Ala Asn Leu Phe Phe Trp Met Gly Tyr Cys Asn Phe Leu Leu Glu  
 210 215 220  
 Asp His Thr Ser Ser Ser Met Phe Arg Arg Gly Leu His Leu Trp Phe  
 225 230 235 240  
 His Gly Trp Thr Leu Asp Pro Leu Trp Leu Ser Lys Ile Leu His Gln  
 245 250 255  
 Cys Asn Ser Phe Val Asn Gly Tyr Met Ile Gln Ala Gly Pro Ile Arg  
 260 265 270  
 Ala Leu Pro Arg Val Leu Leu Glu Leu Leu Gly Arg Glu Ile Leu Ser  
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 Ser Thr Lys Val Ile Phe Trp Arg Asn His Asp Gln Glu Ser Gln Cys  
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 Met Glu Asn Lys Ser Arg Glu Lys Lys Lys  
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 Ser Leu Thr Ser Pro Val Ser Ser Leu Cys Leu Cys Tyr Gln Gln Val  
 35 40 45  
 Asn Phe Ser Val Leu Pro His His Lys Pro Gln Leu Pro Leu His Met  
 50 55 60

Phe Pro Lys Leu Val Ala Asn Ser Val Phe Pro Gly Glu Cys Ile Lys  
65 70 75 80  
Tyr Pro Gly Ile His Cys Tyr Thr Val Ser Asn Gly Ser Ser Phe Ser  
85 90 95  
Leu Leu Trp Arg Arg Thr Pro Glu Glu Ser Thr Ser Pro Gly Pro Ala  
100 105 110  
Ala Ser Cys Met Gly Asn Leu Leu Leu Leu Leu Gly Phe Thr Leu  
115 120 125  
His Ile Leu Ser Leu Arg Lys His Thr Lys Ser Phe His Val Phe Val  
130 135 140  
Pro Val Pro Met Pro Leu Leu Pro Gly Ile Pro Phe Phe Tyr Ser Tyr  
145 150 155 160  
Ser Leu Asn Lys Leu Phe Tyr Ser Phe Ser Ser Gly Pro Leu Pro Leu  
165 170 175  
Ile Gln Leu Arg Asn Asn Tyr Cys Leu Ser Pro Ser Lys Leu Ile Phe  
180 185 190  
Cys Leu Leu Phe Ser His His Thr Leu Pro Phe Thr Ser Val Ala Tyr  
195 200 205  
His Phe Phe Cys Tyr Leu Thr Asn Ala Ser Val Phe Ile His Ser Pro  
210 215 220  
Pro Arg Leu Tyr Ser Ser Trp Val Gln Ser Ile Ser His Ser Phe Leu  
225 230 235 240  
Cys Tyr Leu Cys Leu Ser Gln Cys Trp Leu Gln Ser Arg Tyr Phe Arg  
245 250 255  
Asp Ala Ile Ile Arg Val Arg Val Val Arg Ile Gly Glu Asn Glu Asp  
260 265 270  
Ser Met Val Leu Arg Cys His Ala Ser Cys Lys Glu Asn Met Lys Gly  
275 280 285  
His Phe Phe Phe Leu Gln Leu His Gly Leu Leu Gln Ser Leu Cys Leu  
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	25	Leu	Leu
		His	Asn
		30	Lys
			Ile
Ala	Val	Arg	Val
35	Thr	Lys	Trp
	40	Lys	Met
		Asn	Asn
		Met	Tyr
		45	Arg
			Glu
			Arg
Ile	Gln	Lys	Arg
50	Asn	Leu	Tyr
	55	Phe	Ile
		Phe	Ser
		60	Lys
			Leu
			Pro
			Gln
			Ile
Cys	Leu	Arg	Lys
65	Leu	Tyr	Asp
	70	Leu	Val
		Asn	Arg
		75	Ile
			Leu
			Lys
			Thr
			Leu
			80
Ile	Tyr	Lys	Ser
	85	Gln	Val
		Trp	Ala
		Leu	Val
		90	Thr
			Ser
			Leu
			Asn
			Asp
			Trp
			95
Leu	Ala	Asp	Asn
	100	Leu	Ser
		Gly	Ser
		105	Ser
			Tyr
			Leu
			Glu
			Ile
			Glu
			Asn
			Thr
			110
Ser	Leu	Pro	Phe
	115	Tyr	Asn
		Ser	Ser
		120	Pro
			Gln
			Leu
			Phe
			Gln
			His
			Thr
			Gln
			Cys
			125
Asp	Lys	Lys	Pro
130	Ser	Gln	Ala
		135	His
			Phe
			Ser
			Asn
			Asn
			Glu
			Phe
			Val
			Gly
			140
Ser	Phe	Lys	Cys
145	Gln	Gly	Gln
	150	Gln	Gln
		Val	Arg
		Ala	Gly
		155	Ser
			Glu
			Ala
			Asp
			160
Ile	Phe	Gly	Glu
	165	His	Gly
		Leu	Ala
		Phe	Ser
		170	Phe
			Leu
			Gly
			Thr
			Phe
			Val
			175
Leu	Trp	Met	Glu
	180	Ser	Ile
		Leu	Gly
		Gln	Ala
		185	Glu
			Val
			Leu
			Leu
			Ser
			Trp
			190
Trp	Gln	Asp	Gly
	195	Tyr	Ala
		Arg	Gln
		200	Pro
			Ser
			Cys
			Leu
			Gln
			Arg
			Ala
			Cys
			205
Leu	Val	Arg	Ser
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		215	Ser
			Ser
			Asp
			Leu
			Met
			Asn
			Leu
			Gly
			Leu
			220
Met	Phe	Ile	Pro
225	Gly	Tyr	Ile
	230	Ser	Phe
		Ala	Gln
		235	Val
			Asn
			Gly
			Tyr
			Val
			240
Asp	Cys	His	Thr
	245	Trp	Val
		Ser	Val
		Thr	Thr
		250	Pro
			Gly
			Phe
			Ser
			Asp
			Gly
			255
Val	Ser	Pro	Lys
	260	Gly	Pro
		Thr	Arg
		Val	Glu
		265	Glu
			Ser
			Gly
			Ser
			Trp
			Lys
			270
Glu	Ser	Gln	Gly
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		280	Gly
			Thr
			Asn
			Ala
			Arg
			Trp
			Ala
			Val
			Asn
			285
Gly	Ser	Cys	Pro
290	Asn	Phe	Met
		295	Pro
			Glu
			Pro
			Leu
			Lys
			Gly
			Ile
			Phe
			Thr
			300
Leu	Thr	Val	Gly
		Ile	Asn
		Ile	Gly
		Arg	Gly
		Asp	Ala
			Trp

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 Lys Thr Arg Lys Glu Ile Ala Cys Gly Lys Glu Lys Gln Ser Lys Lys  
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 Arg Lys Thr Asn Leu His Val Ala Asn Leu Phe Val Thr Phe Gln Ile  
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 His Met Ser Cys Ala Met Ile Thr Arg Gly Phe Pro Asp Lys Phe Cys  
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 Phe Ser Ile Ile Phe Leu Gln Leu Tyr Lys His Gly Phe Tyr Ser Asp  
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 Asn Leu Ser Phe Asp Ile Phe Phe Ile Asp Tyr Gln Arg Ile Leu Glu  
                                     100                                      105                                      110  
  
 Thr Asn Gln Ala Gln Tyr Phe Asn Phe Gln Phe Ser Leu Pro Val Ile  
                                     115                                      120                                      125  
  
 Leu Leu Pro His Thr Ala Ser Thr Pro Ser Trp Tyr Gln Leu Lys Lys  
                                     130                                      135                                      140  
  
 Tyr Tyr Val Arg Met Thr Ser Val Thr Leu Val Leu Phe Ile Leu Asn  
 145                                      150                                      155                                      160  
  
 His Ser Glu Pro Tyr His Cys Val Leu Asn Leu His Leu Thr Asp Pro  
                                     165                                      170                                      175  
  
 Tyr Leu Cys Ser Ser Ser Ser Ala Leu Asp Leu Cys Phe Gln Ala Leu  
                                     180                                      185                                      190  
  
 Arg Phe Tyr Asn Val Ile Asn Pro Leu Ser Leu Ile Phe Ser Ser Pro  
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 Leu Thr Cys Met Cys Val Glu Ser Val Tyr Met Leu Glu Asn Tyr Thr  
                                     210                                      215                                      220  
  
 Thr Phe Thr Arg Phe Ile Leu Leu Val Tyr Leu Thr Leu Thr His Phe  
 225                                      230                                      235                                      240  
  
 Tyr Ser Leu Gly His Tyr Leu Cys Met Ala Tyr Ala Glu Val Gly Ser  
                                     245                                      250                                      255

Gly His Tyr Lys His Gln Glu Thr Ile Ser Ile Thr Pro Cys Ile His  
 260 265 270  
 Val His Val Val Leu Lys Tyr Asn Val Lys Tyr Arg Glu Val Thr Leu  
 275 280 285  
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 35 40 45  
 Cys Leu Trp Leu Lys Ala His Leu Cys Gly Pro Gln Arg Asn Tyr Leu  
 50 55 60  
 Pro Leu His Ser Ser Ser Trp His Leu Ser Leu Met Asp Ser Tyr Tyr  
 65 70 75 80  
 Pro Leu Leu Leu Leu Cys Ala Phe Met His Ile Ile Leu Ala Pro Pro  
 85 90 95  
 Asp Gln Leu Ser Leu Gly Gln Gly Phe Asp Leu Val Pro Ile Tyr Ser  
 100 105 110  
 Ser Pro Arg Ala Ser Leu Leu His Thr Val Gly Trp Gly Lys Ile Phe  
 115 120 125  
 Ala Tyr Ala Asp Asp Leu Arg Lys Ile Ile Leu Gln Thr Gly Glu Val  
 130 135 140  
 Lys Ile Ser Leu Ser Cys Ser Ile Trp Asn Glu Leu Val Ala Gly Asn  
 145 150 155 160  
 Gln Leu Glu Val Ser Ser Glu Gly Asn Thr Trp Thr Tyr Pro Leu Leu  
 165 170 175  
 Gln Val Ser Tyr Leu Tyr Lys Asp Cys Val Pro Val Thr Asn Leu Phe  
 180 185 190  
 Leu Asn His Trp Cys Cys Tyr Leu Gln Glu Gly Leu Gly Gln Ile Cys  
 195 200 205

Glu Glu Thr Ser Met Tyr Thr His Pro Tyr His Leu Lys Asn Lys Phe  
 210 215 220  
 Val Cys Val Pro Leu Met Lys Tyr Glu Glu Arg Ser His Ser Phe Gln  
 225 230 235 240  
 Ser Thr Gln Ala Leu Cys Leu Gly Leu Leu Ala Thr His Ala Lys Ile  
 245 250 255  
 Leu Tyr Gln His Phe Val Lys Pro Thr Ile Leu Thr Val Pro Ala Leu  
 260 265 270  
 Gln Pro Val Ile Asp Ser Asn Phe Asn Ser Pro Leu Val Ala Ile Ser  
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 35 40 45  
 Met Val Gly Gln Thr Asn Arg His Ser His Ser Lys Arg Glu Lys Glu  
 50 55 60  
 Gly Ile Leu Gln Gln Gln Gln Ser Lys Arg Ile Leu Arg Leu Gln Asn  
 65 70 75 80  
 Asn Leu Leu Leu Met Pro His Leu Pro Ile Phe Gln Ala His Leu Gly  
 85 90 95  
 Arg Arg Trp Ala Pro Lys Ala Leu Gly Val Pro Val Pro Ala His Met  
 100 105 110  
 Thr Ala Leu Thr Tyr Ser His Met Pro Gly Trp Lys Cys Pro Leu Val  
 115 120 125  
 Ala Leu Leu Val Tyr Gly Gln Arg Val Gly Leu Leu Leu Cys Gln  
 130 135 140  
 Ala Gln Pro Trp Arg Leu Phe Val Val Ala Pro Pro Leu Cys Gln Phe



145                      150                      155                      160  
 Phe Ala Ala Ser Arg Leu Ser Arg Ala Ser Phe Glu Ile Cys Val Glu  
                                  165                      170                      175  
 Ser Ala Phe Pro Leu Trp Tyr Cys Thr Val Cys Pro Gly Gly Asp Asp  
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 Thr Arg Thr Leu Pro Thr Phe Ile Ile Cys Ala Leu Gln Lys Gly Gly  
                                  195                      200                      205  
 His Trp Ser Pro His His Thr Trp Thr Leu Trp Ser His Ala Trp Asn  
                                  210                      215                      220  
 Asp Ala Val Leu Cys Gln Lys Ala Gly Ser Arg Asp Glu Val Ala Gly  
                                  225                      230                      235                      240  
 Arg Lys Cys Ala Pro Val Gly Ile Leu Gly Pro Ser Phe Asp Leu Val  
                                  245                      250                      255  
 Leu Ser Pro Arg Pro Trp His Ala Gly Pro Val Met Gly Ala Ala Ala  
                                  260                      265                      270  
 Val Met Met Ser Glu Met Leu Leu Val Gly Val Ile Pro Pro Leu Pro  
                                  275                      280                      285  
 Lys Ala Pro Gly Phe Cys Ser Ser Met Leu Ile Ser Asn Gly Cys Trp  
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 Ala Thr Ser Leu Val Phe Ser Pro Lys  
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                                  20                      25                      30  
 Leu Leu Tyr Phe Ser Leu Phe Ala Met Tyr Ile Ile Leu Gln Ser Cys  
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 Asn His Thr Gln Tyr Met Ile Leu Ser Cys Phe Pro Thr Tyr His Tyr  
                                  50                      55                      60  
 Arg Tyr Phe Tyr Cys Tyr Ile Val Phe Met Val Val Ile Val Asn Ser  
 65                      70                      75                      80  
 Tyr Ala Val Ile Val His Ile Glu Val Leu Tyr Leu Leu Ser Tyr Pro  
                                  85                      90                      95

Ile Ile Phe Lys Gln Phe Leu Ile Ser Phe Tyr Asn Lys His Gly His  
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 Ile Ser Asp Arg Gly Val Leu Phe His Ile Leu Thr Tyr Phe Ser His  
 115 120 125  
 Ser Val Thr Ile Thr Pro Lys Asn Thr Asn Phe Leu Ser Leu Asp Val  
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 Tyr Phe Gln Lys Ile Phe Lys Arg Cys Ile Asn Leu Leu Cys Ser Trp  
 145 150 155 160  
 Cys Lys Arg Pro Phe Cys His Cys Phe Leu Glu Ser Arg Ala Ser Lys  
 165 170 175  
 Ser Arg Asp Met Trp Leu Gly Gly Arg Asn Pro Ala Trp Gly Arg His  
 180 185 190  
 Ser Val Lys Asn Ser Ser Ser His Trp Tyr Thr Gly Phe Ile Phe Leu  
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 Cys Phe Leu Gln Thr Glu Gln Leu Ile Thr Leu Trp Val Leu Phe Val  
 210 215 220  
 Phe Thr Ile Val Gly Asn Ser Val Val Leu Phe Ser Thr Trp Arg Arg  
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 Lys Lys Lys Ser Arg Met Thr Phe Phe Val Thr Gln Leu Ala Ile Thr  
 245 250 255  
 Gly Lys Leu Cys Lys Glu Ala Gly Ser Tyr Met Ser Pro Tyr Gly Phe  
 260 265 270  
 Leu Leu Leu Met Asn Phe Ile Lys Lys Lys Lys Met Arg Ile Gly Gln  
 275 280 285  
 Phe Gly Asn Asn Phe Lys Asn Ile Lys Pro Ile Phe Glu Tyr Phe Leu  
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 Asn Val Cys Ser Cys Thr Cys Glu Val Lys Ser Phe Ser Leu Leu Ser  
 35 40 45

Asn Ser Tyr Val Pro Asn Ile Phe Ser Lys Phe Leu Lys Thr Tyr Asn  
 50 55 60  
 Gly Glu Lys Asn Asn Pro Phe Ser Ser Pro Ala Ser Leu Met Lys Asn  
 65 70 75 80  
 Ser His Phe Ser Leu Phe Leu Leu Phe Leu Leu Val Val Phe His Ile  
 85 90 95  
 Ser Cys Leu Ser Ala Val Ser Cys Phe Met Gln Phe Arg Pro Tyr Leu  
 100 105 110  
 Leu Thr Ser Leu Ser Phe Gln Tyr Lys Asp Ser Cys Ile Phe Ser Phe  
 115 120 125  
 Asn Phe Thr Phe Leu Asn Ser Pro Phe Pro Phe Cys Asp Pro Gly Ile  
 130 135 140  
 Ser Gly Val Leu Phe Phe Phe Ile Leu Pro Asp Phe Ile Tyr Ile Cys  
 145 150 155 160  
 Val Tyr Ser Phe Leu Leu Phe Phe Lys Leu Lys Thr Cys Leu Ser Ser  
 165 170 175  
 Lys Ser Gly Ser Phe Phe Phe Ser Trp Arg Pro Leu Ser Gln Asn Pro  
 180 185 190  
 Leu Ser Phe Cys Phe Asn Glu Asp Tyr Met Leu Ser Leu Trp Leu Pro  
 195 200 205  
 Ser Cys His Trp Ser Ser Ser Leu Cys Cys Tyr Pro Gly Leu Lys Leu  
 210 215 220  
 Leu Phe Leu Asp Pro Ile Leu Ser Leu Ser Trp Phe Ile Thr Leu Phe  
 225 230 235 240  
 Cys Trp Gly Thr Ser Ser Cys Met Trp Asn Val Met Ser Ala Ser Leu  
 245 250 255  
 Cys Phe Lys Met Tyr Ile Phe Cys Pro Leu Phe Asp Leu Ala Glu Asn  
 260 265 270  
 Arg Ile Leu Asp Cys Lys Ile Gln Lys Leu Leu Gln Arg Leu His His  
 275 280 285  
 Arg Gln Lys Asn Leu Cys Thr His Phe Pro Pro Thr Ser Ser Pro Pro  
 290 295 300  
 Ala Ala Arg Ser Asn His Glu Ser Phe Cys Gln Asn Arg Phe Ala Tyr  
 305 310 315 320  
 <210> 221  
 <211> 318  
 <212> PRT  
 <213> Homo sapiens

<400> 221

Cys Ile Lys Val Phe Ile Leu Lys Gly Lys Ala Thr Met Ile Ala Gln  
1 5 10 15  
Leu Trp Tyr Ile Ile Ile Ser His Ile Ile Phe Leu Leu Leu Glu Lys  
20 25 30  
Gly Ile Tyr Asp Phe Ser Arg Met His Thr Glu Lys Pro Leu Cys Ile  
35 40 45  
Ile Leu Cys Glu Ser Lys Leu Cys Thr Tyr Phe Glu Val Ile Cys Ile  
50 55 60  
Leu Cys Arg Arg Lys Glu Asn Asn Leu Leu Tyr Phe Val Cys Gly Ile  
65 70 75 80  
Gly Asn Val Phe Leu Thr Lys Pro Lys Asn Ile Ser His Ser Lys Gly  
85 90 95  
Lys Met Gly Leu Asn Glu Lys Met Val Asp Leu Lys Tyr Gly Gly Arg  
100 105 110  
Phe Phe Trp Gly Thr Leu Asp Leu Ile Met Phe Phe Ser Ile Pro Phe  
115 120 125  
Leu Gln Met Phe Ile Ile Leu Leu Leu Phe Ile Tyr Ala Ala Ile Ile  
130 135 140  
Tyr Val Cys Ser Cys Phe Ser Cys Ser Gln Thr Leu Tyr Asn Val Ile  
145 150 155 160  
Ile Gln His Glu Ser Phe Ser Ile Leu Leu Phe Leu Val Asn Ile Ile  
165 170 175  
Ile Trp Gly Tyr Trp Cys Thr His Cys Gln Phe Ile His Phe Asn Tyr  
180 185 190  
Ser Thr Gly Phe Trp Ser Met Asn Ile Ser Tyr Phe Ile Tyr Leu Tyr  
195 200 205  
Pro Ile Asp Val Tyr Leu Val Pro Ile Phe Ala Val Lys Asn Asn Ala  
210 215 220  
Ala Ile Lys Pro Ser Gly Ile Cys Phe Ser Lys Cys Ile Pro Arg Ser  
225 230 235 240  
His Arg Phe Ser Gly Cys His Ser Leu Lys Leu Leu Gly Lys Thr Val  
245 250 255  
Arg Ile Leu Gly Asn Leu Leu Asn Leu Thr Trp Leu Asn Phe Leu Ala  
260 265 270  
Gln Met Arg Val Val Leu Asp Leu Ile Lys Asn Met Val Ile Phe Cys  
275 280 285  
Glu Thr Leu Ala Asn Tyr Asp Asn Lys Trp Ser Leu Gly Ile Ser Val

290                      295                      300  
 Ile Thr Ala Ile Lys Arg Gly Leu Lys Tyr Pro Lys Glu Lys  
 305                      310                      315  
  
 <210> 222  
 <211> 317  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 222  
  
 Asn Tyr Leu Ser Asp Cys His Ser Phe Met Glu Leu Ser Val Asn Lys  
 1                      5                      10                      15  
  
 Val Leu Leu Tyr Val Asn Met Arg Leu Ile Phe Phe Leu Ser Leu Leu  
                     20                      25                      30  
  
 Phe Gly Leu Tyr Phe Phe Gln Val Arg Ala Ile His Gly Ser Ala Ser  
                     35                      40                      45  
  
 Thr Asp Gln His Leu Leu Ser Tyr Phe Ala Ile Trp Leu Pro Gly Leu  
                     50                      55                      60  
  
 Arg Glu Cys Phe Phe Asn Leu Tyr Trp Trp His Cys Trp Leu Leu Ile  
 65                      70                      75                      80  
  
 Leu Leu Phe Val Leu Ala Arg Leu Leu Phe Lys Arg Arg Val Ile Asn  
                     85                      90                      95  
  
 Ser Val Leu Arg Ala Glu Val Lys Tyr Arg Met Glu Leu Glu Glu Asn  
                     100                      105                      110  
  
 Glu Ala Ser Ile Ser Val Lys Lys Ser Phe Ile Lys Ala Val Gly Asp  
                     115                      120                      125  
  
 Arg Glu Leu Gly Val Thr Ile Leu Val Pro Ile Val Met Val His Pro  
                     130                      135                      140  
  
 Gly Lys Ile Gln Gly Lys Arg Glu Ser Leu Trp Lys Ser Phe Gly Cys  
 145                      150                      155                      160  
  
 Val Leu Ser Cys Phe Arg Lys Leu Ala Asn Phe Tyr Thr Ser Val Phe  
                     165                      170                      175  
  
 Arg Leu Ser Cys Leu Asp Thr His Pro Thr Gln Ser Ala Gln Gln Tyr  
                     180                      185                      190  
  
 Phe Leu Cys Ser Ser Leu Ser Pro Gly Ile Arg Met Ala Pro Leu Gly  
                     195                      200                      205  
  
 Glu Leu Leu Ser His Met Ile Lys Asp Leu His Tyr Phe Leu Ser Lys  
                     210                      215                      220  
  
 Ser Arg Arg Lys Val Gly Glu Leu Ala Trp His Leu Ala Gly Thr Tyr  
 225                      230                      235                      240



Leu Ile Ser Leu Pro Leu Arg Leu Phe Ile Asp Ile Phe Thr Phe Tyr  
 195 200 205  
 Phe Glu Ile Ile Val Asp Ser Gln Glu Val Thr Arg Glu Arg Ser Cys  
 210 215 220  
 Val Leu Phe Thr Gln Ile Ser Pro Met Leu Arg Phe Tyr Ile Thr Val  
 225 230 235 240  
 Ile Gln Tyr Glu Asn Gln Glu Thr Asp Ile Gly Ser Ile Tyr Val Tyr  
 245 250 255  
 Thr Ser Met Pro Phe His His Val Met Pro Pro Ser Pro Ser Cys Arg  
 260 265 270  
 Thr Val Pro Ser Pro Arg Arg Ser Ala Thr Cys Cys Ser Phe Lys Val  
 275 280 285  
 Ile Pro Ala Leu Phe Pro Val Pro Thr His Cys His Tyr Ala Pro Leu  
 290 295 300  
 Val Thr Thr Asn Leu Phe Ser His Leu Tyr  
 305 310  
 <210> 224  
 <211> 321  
 <212> PRT  
 <213> Homo sapiens  
 <400> 224  
 Lys Pro Ser Ser Gly Cys Gly Gly Trp Met Trp Asp Trp Met Gly Thr  
 1 5 10 15  
 Gln Lys Asn Ile Lys Thr Met Ala Thr Val Ile Ile Ile Val Ile Asn  
 20 25 30  
 Ser Gln Asp Asn Asn His Leu Ala Thr Val Ala Met Tyr Leu Lys Asp  
 35 40 45  
 Tyr Ser Leu Gly Val Phe Phe Leu Met Ser Met Glu Gln Asp Asp Trp  
 50 55 60  
 Ala Phe Glu Asp Ile Lys Glu Thr Lys Gly Pro Asp Cys Asn Gln Arg  
 65 70 75 80  
 Phe His Ser His Arg Pro Gly Phe Thr Trp Gln His Thr Phe Trp Thr  
 85 90 95  
 Phe Phe Phe Phe Ser Gly Lys Glu Thr Gly Ser Val Glu Asn Gly Arg  
 100 105 110  
 Met Arg Thr Asn Cys Arg Ala Leu Pro His Ser Trp Thr Leu Ser His  
 115 120 125  
 Ser Ser Arg Trp Gly Pro Pro Ala His Cys Trp Leu Cys Pro Pro Gln

130                      135                      140  
 Phe Leu Arg Ile His Thr Asp Phe Ala Lys Ile Leu Arg Tyr Val Gly  
 145                      150                      155                      160  
 His Glu Leu Trp Val Cys Ala His Leu Val Pro Ser Leu Tyr Ser Thr  
 165                      170                      175  
 Leu His Ser Ser Gly Val Phe Leu Thr Ala Gly Ala Thr Phe His Leu  
 180                      185                      190  
 His His Tyr Tyr Ile Lys Trp Ala Ser Ile Phe Pro Ser Glu Phe Gln  
 195                      200                      205  
 Pro Leu Ser Gly Asn Leu Thr Phe Phe Leu Val Ser Phe Ala Leu Arg  
 210                      215                      220  
 Phe Cys Pro Phe Tyr Cys Ser Asn Glu Phe Thr Gln Pro Ser Ile Pro  
 225                      230                      235                      240  
 His Glu Ser Gly Gln Asp Pro Val Thr Cys Asp Ser His Thr Asp Cys  
 245                      250                      255  
 Val Arg Val Thr Pro Pro Val Pro Gly Phe Pro Glu Pro Cys Leu Ser  
 260                      265                      270  
 Arg Leu Thr Gly Gln Ser Trp Asp Met Asn Trp Ala Pro Glu Leu Ala  
 275                      280                      285  
 Leu Phe Val Ser Arg Ser Ser Arg Cys Leu Cys Arg Leu Pro Asn Pro  
 290                      295                      300  
 Cys Ser Trp Ala Trp Val Ala Glu Ser Ala Gly Arg Leu Trp Cys Met  
 305                      310                      315                      320

His

<210> 225  
 <211> 314  
 <212> PRT  
 <213> Homo sapiens

<400> 225

Leu Cys Tyr Cys Val Ile Ile Ile Ile Val Pro Phe Pro Ser Ile Pro  
 1                      5                      10                      15  
 Gln Thr His Thr Tyr Val Glu Ile Leu Arg Gly Asp Asp Val Leu Phe  
 20                      25                      30  
 Thr Ser Ala Cys Leu Met Leu Ser Pro Val Leu Gly Thr Asn Ala Ile  
 35                      40                      45  
 Val Phe Leu Glu His Glu Ile His Gln Lys His Glu Trp Ile Trp Trp  
 50                      55                      60



Gly His Lys Arg Leu Thr Pro Gly Ser Arg Asn Leu Gly Gly Glu Thr  
 65 70 75 80  
 Ser Gly Leu Glu Gly Ala Glu Asp His Cys Val Arg Ser Thr Trp Phe  
 85 90 95  
 Trp Leu Ala Gly Leu Ala Arg Met Gln Arg Ser Phe Trp Val Leu Leu  
 100 105 110  
 Lys Phe Lys Thr Thr Ile Ile Ile Asn Ile His Leu Val Leu Thr Met  
 115 120 125  
 Cys Gln Ser Leu Ile Ala Phe Tyr Val Phe Ser His Ser Ser Lys Phe  
 130 135 140  
 Gly Leu Asp Ile Phe Pro Val Tyr Thr Ile His Met Arg Lys Arg Val  
 145 150 155 160  
 Glu Gln Gly Gly Ala Glu Thr Cys Pro Arg Ile His Ser Lys Asn Gly  
 165 170 175  
 Asn Trp Asp Trp Ser Pro Arg Asp Ser Cys Phe Leu Asp Phe Val Phe  
 180 185 190  
 Leu Ile Ser Leu Pro Leu Arg Leu Phe Ile Asp Ile Phe Thr Phe Tyr  
 195 200 205  
 Phe Glu Ile Ile Val Asp Ser Gln Glu Val Thr Arg Glu Arg Ser Cys  
 210 215 220  
 Val Leu Phe Thr Gln Ile Ser Pro Met Leu Arg Phe Tyr Ile Thr Val  
 225 230 235 240  
 Ile Gln Tyr Glu Asn Gln Glu Thr Asp Ile Gly Ser Ile Tyr Val Tyr  
 245 250 255  
 Thr Ser Met Pro Phe His His Val Met Pro Pro Ser Pro Ser Cys Arg  
 260 265 270  
 Thr Val Pro Ser Pro Arg Arg Ser Ala Thr Cys Cys Ser Phe Lys Val  
 275 280 285  
 Ile Pro Ala Leu Phe Pro Val Pro Thr His Cys His Tyr Ala Pro Leu  
 290 295 300  
 Val Thr Thr Asn Leu Phe Ser His Leu Tyr  
 305 310  
 <210> 226  
 <211> 312  
 <212> PRT  
 <213> Homo sapiens  
 .  
 <400> 226  
 Gly Ala Arg Gly Gly Glu Ala Ser Thr Ser Leu Glu Ser Gln Val Glu  
 1 5 10 15

Asp Thr Ala Glu Gln Thr Ser Asn Leu Ile Thr Val Thr Leu Ile His  
 20 25 30  
 Pro Gln Leu Ala Lys Tyr Thr Leu Ile Val Asn Phe Leu Pro Leu Trp  
 35 40 45  
 Ser Leu Ser Asp Ile Ser Thr Asp Leu Leu Phe Ile Leu Leu Arg Leu  
 50 55 60  
 Arg Asn Ile Ile Arg Ile Leu Gln His Leu Gly Glu Ile Ile Glu Ser  
 65 70 75 80  
 Ala Met Val Ser Phe Ala Asp Ile Tyr Ser Trp Ser Lys Trp Asn Thr  
 85 90 95  
 Asn Gln Asn Trp Leu Pro Tyr Ile Leu Gln Arg Pro Thr Gly Gly Lys  
 100 105 110  
 Gly Leu Trp Lys Val Cys Phe Ala Thr Arg Gln Ile Leu Asp His Pro  
 115 120 125  
 Val Ser Gly Ser Ile His Ser Phe Pro Asp Ser Pro Asp Asp Ile Pro  
 130 135 140  
 Pro Ser Phe Thr Tyr Ile Asn Ser Thr Val Pro Ile Cys Tyr Ile Ala  
 145 150 155 160  
 Ser Phe Leu Leu Phe Ile Ile Cys Leu Pro His Gln Asn Ala Ser Ser  
 165 170 175  
 Ile Trp Ala Val Ala Thr Leu Phe Thr Val Tyr Leu Ser Val Ser Met  
 180 185 190  
 Lys Ser Asp Ile Met Pro Gly Ile Tyr Tyr Glu Leu Asn Asn Tyr Val  
 195 200 205  
 Asn Glu Ile Met Arg Lys Ser Cys Leu Ile Thr Cys Gln Pro Tyr Asn  
 210 215 220  
 Ala Ser Gln Phe Phe Pro Leu Gln Phe Leu His Leu Asn Trp Ile Thr  
 225 230 235 240  
 Gln Met Leu Thr Leu Trp His Cys Trp Asn Asn Tyr Leu Lys Ser Cys  
 245 250 255  
 Lys Phe Ile Ala Tyr Trp Lys Cys Gly Ser Glu Cys Asp Thr Pro Gln  
 260 265 270  
 Tyr Gly Val Leu Val Val Leu Thr Glu Gly Asn Lys Ser Phe Arg Asn  
 275 280 285  
 Lys Val Phe Leu Ala Phe Ser His Leu Ser Phe Ser Cys Ser Pro Phe  
 290 295 300  
 Phe Pro Lys Ala Asp Gln Arg Asn  
 305 310

<210> 227  
 <211> 321  
 <212> PRT  
 <213> Homo sapiens

<400> 227

Gly	Cys	Ser	Pro	Glu	Asp	Asp	Leu	Gly	Cys	Ser	Gly	Val	Asn	Tyr	Pro
1				5				10					15		
His	Phe	Leu	Arg	Ala	Ser	Met	Trp	His	Ser	Trp	Pro	Trp	Ala	Ser	Ala
		20					25					30			
Cys	Pro	Ala	Asn	Ala	Gln	Pro	Val	Pro	Ala	Val	Pro	Pro	Pro	Leu	Ala
	35					40					45				
Ala	Gln	Pro	Gln	Val	Trp	Pro	Ser	Gly	Leu	Tyr	Pro	Arg	Pro	Pro	His
	50					55					60				
Leu	Pro	Thr	Leu	Phe	Leu	Cys	Ser	Glu	Leu	Ser	Thr	Ala	Ala	Pro	Ala
65				70					75					80	
Pro	Trp	Leu	Pro	Leu	Ile	Leu	Cys	Leu	Val	Ser	Phe	Phe	Gly	His	Ser
			85					90						95	
Phe	Ala	Ala	Thr	Leu	Tyr	Trp	Ile	Thr	Leu	Leu	Gly	Val	Leu	Ile	Ile
			100					105					110		
Ser	His	Pro	Leu	Leu	Leu	Pro	Asn	Gly	Pro	Ser	Thr	Ile	Ser	Phe	His
		115					120					125			
Arg	Leu	Asn	Gly	Lys	Gly	Gly	Val	His	Ile	His	Arg	Ile	Lys	Gln	Val
	130					135					140				
Met	Pro	Leu	His	Ser	Gly	Val	Cys	Asp	Asp	Asn	Phe	Tyr	Ala	Phe	Tyr
145					150					155				160	
Thr	Asn	Ile	Phe	Val	Ser	Leu	Cys	Phe	Leu	Pro	Cys	Leu	Arg	Ala	Leu
			165						170					175	
Gln	Gly	Leu	Ala	Leu	Gly	His	Pro	Val	Leu	His	Thr	His	Thr	Arg	Thr
		180						185						190	
His	Thr	Arg	Thr	Cys	Thr	His	Val	His	Thr	His	Ala	His	Thr	His	Thr
		195					200					205			
His	Thr	His	Lys	His	Thr	His	Ser	Leu	Ala	Leu	Ala	Asn	Ala	Ser	Leu
	210					215					220				
Ala	Leu	Thr	Thr	Asn	Val	Ser	Ala	Ser	Asp	Leu	His	Asn	Leu	Ile	Trp
225				230						235				240	
Leu	Phe	Leu	Phe	Leu	Gly	Val	Ile	Cys	Leu	Pro	Glu	Gly	Arg	Ala	Asn
			245						250					255	
Ser	Pro	Ala	Ile	Pro	Ala	Ala	Tyr	Ser	Leu	Pro	Val	Pro	Ser	Phe	Pro

260                      265                      270  
 Arg Arg Gln Gln Thr Glu Arg Gly Lys Arg Tyr Lys Glu Ala Trp Gly  
           275                      280                      285  
 Trp Gly Lys Glu Ser Ser Tyr Leu Thr Ser Ala Pro Leu Thr Leu Leu  
           290                      295                      300  
 Gly Glu Val Pro Thr His Ser Ser Gly Met Thr Thr Arg Met Val Ser  
 305                      310                      315                      320  
 Leu

<210> 228  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 228

Asp Cys Ala Ala Ala Leu Pro Gly Gln Ser Lys Thr Pro Phe Gln Lys  
 1                      5                      10                      15  
 Lys Lys Lys Lys Lys Lys Glu Arg Lys Glu Phe Met Asp Val Ile Val  
           20                      25                      30  
 Lys Gly Leu Val Pro Ser Pro Ile Ser Cys Phe Pro Ser Cys His Val  
           35                      40                      45  
 Thr Cys Trp Phe Pro Phe Thr Phe Cys His Asp Trp Lys Leu Pro Gly  
           50                      55                      60  
 Ala Ser Pro Glu Ala Lys Gln Met Pro Gly Pro Cys Phe Leu Tyr Ser  
 65                      70                      75                      80  
 Leu Leu Asn Pro Glu Pro Asn Lys Pro Leu Phe Ile Thr Asn Tyr Leu  
           85                      90                      95  
 Gly Ser Asp Ser Pro Leu Gln Cys Lys Trp Thr Asn Thr Pro His Asp  
           100                      105                      110  
 Leu His Pro Gln Thr Thr Gly Gly Thr Gln His  
           115                      120

<210> 229  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<400> 229

Ser Ala Cys Gly Gly Phe Asn Gly Leu His Phe Tyr Ser Asn Ile Ser  
 1                      5                      10                      15  
 His Gln Leu Tyr Ile Tyr Tyr Leu Lys Val Phe Leu Phe Ile Val Phe  
           20                      25                      30

Gln Phe Ile Phe Gln Ile Arg Ser Lys Gln Asn Tyr Ser Trp Arg Leu  
           35                                  40                                  45  
 Cys Cys Leu His Pro Gln Tyr Gln Met Phe Met Ala Ser Thr Glu Pro  
           50                                  55                                  60  
 Gly Val Ser Met Glu Ser Leu Arg Asp Cys Leu Ser Phe Ser Glu Glu  
  65                                  70                                  75                                  80  
 Ser Val Met Phe Ser Ile Pro Glu Glu Ala Glu Ile Thr Leu His Tyr  
                                   85                                  90                                  95  
 Phe Phe Glu Leu Cys Ala Gly Arg His Gly Ser Glu Ile Cys Leu Ser  
                                  100                                 105                                 110  
 Asp Ser Asn Ser Ser Ser Ile Cys Val Leu Val Phe Val Val Ala Phe  
                                  115                                 120                                 125  
 Cys Ile Gln Leu Pro Asp Asn Phe Phe Leu Met Phe Cys Cys Asn Leu  
  130                                 135                                 140  
 Val Lys Leu Leu Phe Tyr Lys Leu Met Phe Trp Tyr Phe Gly His Gln  
  145                                 150                                 155                                 160  
 Ile Leu Ala Arg Gly Lys Ile Arg Thr Arg Ser Thr Ser Cys Lys Thr  
                                  165                                 170                                 175  
 Lys Leu Ile Phe Leu Val Asp Phe Trp Asn Gly Leu Phe Cys Phe Pro  
                                  180                                 185                                 190  
 Ile Cys Val Tyr Phe Leu Lys Ser Cys Arg Cys Ile Tyr Glu Tyr Leu  
                                  195                                 200                                 205  
 Phe His  
       210  
 <210> 230  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens  
 <400> 230  
 Val Ile Asn Ser Ser Cys Pro Ser Ile Ile Gly Leu Gly Thr Pro Gly  
  1                                  5                                 10                                 15  
 Phe Ser Cys Ser Ser Ser Val Ile Gly Arg Lys Ile Gly His Trp Leu  
                                  20                                 25                                 30  
 Lys Gln Ile Leu Ser Phe Leu Gly Val Val Phe Thr Leu Lys Ala Leu  
                                  35                                 40                                 45  
 Arg Pro Leu Gly Gly Ser Ala Ile Leu Gln His Gly Arg Cys Pro His  
                                  50                                 55                                 60  
 Thr Trp Met Ala Ala Phe Tyr Tyr Tyr Ser Leu Asp Thr Gly Phe Phe

65		70		75		80
Ala His Val Tyr Thr Leu Gly Ser Ile Cys Tyr Pro Phe Phe Thr Leu						
	85			90		95
Lys Gln Val Ile Gly Lys Phe Ile Ser Ile Trp Lys Thr Asn Asp Gln						
	100		105			110
Lys Asn Pro Ser Asn Pro Lys Phe Thr Glu Ala Arg Leu Leu Lys Arg						
	115		120			125
Lys Asp Ile Phe Leu Cys Arg Lys Val Met Phe His Arg Gly Phe Cys						
	130		135			140
Asn Ala Leu Thr Leu Asp Arg Ser Pro Pro Ser Ile Leu Gly Ile Thr						
	145		150		155	160
Ser Phe His Phe Ser Cys Lys His Ser Ser Pro Cys Thr Leu Gln Asp						
		165		170		175
Phe Ser Leu Phe Glu Ile Gly Leu His Ser Val Gly Arg Gly Asp Trp						
	180		185			190
Phe Gln Lys Glu Gly Ala Ala Gly Arg Asp Phe Ala						
	195		200			
<210> 231						
<211> 186						
<212> PRT						
<213> Homo sapiens						
<400> 231						
Gln Gly Arg Cys Thr Pro Pro Val Ile Leu Gly Val Ile Ser Ser Pro						
1		5		10		15
Pro Leu Asp Ile Arg Asn Asn Ile Thr Ala Gly Val Gly Val Val Tyr						
	20		25			30
Ser Leu Cys Asn Ile Gly Ser Asn Ile Ile Leu Ser Pro His Trp Ile						
	35		40			45
Leu Gly Thr Ile Ser Gln Glu Val Trp Thr Pro Pro Ala Ile Leu Gly						
	50		55			60
Val Thr Ser Phe Ser Phe Pro Ser Gly Tyr Glu Gln Tyr Cys Ile Gly						
65		70		75		80
Val Tyr Thr Pro Ser Asp Ile Arg Ser Asn Ile Ile Leu Ser His Ser						
	85		90			95
Gly Tyr Glu Gln Tyr Leu Arg Arg Ser Val Glu Pro Leu Arg Tyr Glu						
	100		105			110
Tyr His Pro Leu Pro Pro Trp Ile Leu Gly Thr Ile Thr Gln Gly Glu						
	115		120			125

Tyr Thr Ala Pro Val Ile Leu Arg Val Ile Ser Ser Pro His Leu Asn  
 130 135 140

Ile Arg Asn Asn Ile Arg Gly Val Gly Tyr Thr Ile Cys Asp Ser Gly  
 145 150 155 160

Arg Asn Ile Ile Leu Ser Pro Pro Gly Tyr Glu Gln Tyr His Lys Trp  
 165 170 175

Ser Ile His Pro Leu Arg Tyr Trp Glu Tyr  
 180 185

<210> 232

<211> 157

<212> PRT

<213> Homo sapiens

<400> 232

Asp Asn Leu Cys Ser Pro Cys Ser Ser Thr Pro His Ile Pro Ile Val  
 1 5 10 15

Cys Pro Phe His Ser Ala Pro Phe Ser Val Gln Thr Glu Leu Phe Thr  
 20 25 30

Asn His Tyr Pro Leu Leu Glu Met Glu Gly Ala Pro Phe Pro Thr Pro  
 35 40 45

Pro Leu Pro Pro Gln Leu Ser Ser Pro Arg Arg Leu Ser Ile Asn Arg  
 50 55 60

Leu Thr Ile Ser Leu Asn Phe His Ile Phe Val Trp Leu Ser Tyr Leu  
 65 70 75 80

Phe Thr Phe Ile Asn Leu Leu Cys Phe Ser Leu Val Asn Gln Ser Phe  
 85 90 95

Phe Ile Gly Val Ser Ala Val Ser Leu Tyr Asp Gly Glu Glu Lys Asn  
 100 105 110

His Pro Leu Ser Thr Pro Thr Ser Asp Arg Ser Gln Asp Ile Pro Leu  
 115 120 125

Lys Phe Gly Lys Val Asn Thr Ser Thr Pro Cys Ile Leu Pro Asp Asn  
 130 135 140

Thr Lys Asn Phe Ile Gln Tyr Ile Tyr Tyr Met Ile Lys  
 145 150 155

<210> 233

<211> 178

<212> PRT

<213> Homo sapiens

<400> 233

Arg Ser Arg Lys Val Asn Trp Pro Lys Val Gly Ile Tyr Ile Pro Val

1                      5                      10                      15  
 Leu Leu Leu Glu Cys Cys Leu Phe Leu Asn His Pro Trp Ser Arg Pro  
                     20                      25                      30  
 Thr Pro Ser Cys Thr Tyr Thr Asn Pro Ile Leu Ser Gln Thr Gly Leu  
                     35                      40                      45  
 Trp Leu Asp Ile Gly Glu Lys Gln Leu Asp Gly Leu Thr Pro Lys Lys  
                     50                      55                      60  
 Asn Pro Ala Arg Asp Gly Gln Asn Phe Arg Gly Gly Leu Arg Tyr Arg  
                     65                      70                      75                      80  
 Pro Cys Leu Leu Leu Ser Ser Pro Ser Cys Arg Glu Pro Arg Phe Ile  
                     85                      90                      95  
 His Asn Lys Ile Pro His Ile His His Pro Ser Ile Tyr Ser Cys Asn  
                     100                      105                      110  
 Leu Ile Phe Pro Gly Trp Trp Thr Arg Ala Arg Glu Pro Gln Val Glu  
                     115                      120                      125  
 Ile Gln Lys Ala Val Thr Leu Ala Leu Cys Pro Cys Trp Arg Arg Ala  
                     130                      135                      140  
 Ala Ala Ser His Arg Gly Arg Gly Pro Thr Glu Leu Leu Thr Leu Lys  
                     145                      150                      155                      160  
 Pro Ser Ala Asp Gly Arg Ala Lys Thr Ala Leu Glu His Ala Leu Trp  
                     165                      170                      175

Gly Phe

<210> 234  
 <211> 188  
 <212> PRT  
 <213> Homo sapiens

<400> 234

Ile Glu Thr Lys Leu Asn Thr Phe Ala Lys Leu Leu Arg Ser Lys Phe  
 1                      5                      10                      15  
 Leu Val Pro Arg Leu Glu Leu Pro Asn Ala Asp Lys Ser Ser Pro Val  
                     20                      25                      30  
 Gly Ser Pro Thr Leu Phe Lys Gln Phe Leu Asp Phe Ala Pro Val Glu  
                     35                      40                      45  
 Ala Asp Met Leu Asn His Lys Thr Pro Leu Leu Leu Ala Leu Ala Tyr  
                     50                      55                      60  
 Cys Phe Gly Arg Ser His Phe Ser Lys Ile Arg Ala Ser Leu Ile Asn  
                     65                      70                      75                      80



Thr Gly Ile Arg Phe Leu Ser Gly Val Gly Ile Pro Glu Asp Arg Ile  
                     85                    90                    95  
 Ile Tyr Phe Ala Leu Ser Arg Cys Val Met Arg Thr Glu Ala Met Leu  
                     100                    105                    110  
 Ile Arg Asp Pro Trp Glu Leu Val Ile Tyr Tyr Leu Leu Phe Leu Pro  
                     115                    120                    125  
 Lys Ile Asp Leu Met Glu Arg Gly Cys Ile Ile Tyr Pro Leu Ser Lys  
                     130                    135                    140  
 Glu Ala Phe Pro Asn Thr Thr Glu Ala Val Ile Leu Lys Thr Ala Leu  
 145                    150                    155                    160  
 Trp Leu Cys Ser Gln Leu Tyr Phe Leu Pro Phe His Asn Phe Leu Pro  
                     165                    170                    175  
 Ser Ala Met Glu Leu Met Gly His Thr His Ile His  
                     180                    185  
  
 <210> 235  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 235  
  
 Lys Lys Lys Thr Pro Met Ile Trp Ile Leu Leu Ser Phe Leu Phe Ser  
 1                    5                    10                    15  
 Gln Met Val Ile Leu Lys Leu Ile Glu Val Val Tyr Arg Val His Ser  
                     20                    25                    30  
 His Thr Val Arg Lys Arg Gln Ser Gln Gly Leu Asn Ser Ser Ser Leu  
                     35                    40                    45  
 Thr Ile Glu Pro Ile Phe Leu Ile Thr Ile Gln Tyr Phe Thr Ile Cys  
                     50                    55                    60  
 Ser Ile Lys Arg Asn His Phe Ser Glu Trp Arg Asn Ile His Glu Asn  
 65                    70                    75                    80  
 Lys Ser Ile Ile Gln Asp Thr Cys Lys Ala Ser Arg His Ser Arg Phe  
                     85                    90                    95  
 Arg Leu Leu Ala Pro Trp Pro Arg Leu Ile Thr Phe Gln Glu Asn Lys  
                     100                    105                    110  
 Thr Thr Tyr Gln Asp His Thr Ser Arg Asn Asp Leu Arg Ile Met Gly  
                     115                    120                    125  
 Thr Ala Ile Trp Val Ser Asn Gly Leu Glu Ser Asp Lys Trp Phe Leu  
                     130                    135                    140  
 Asn Arg Phe Pro Glu Trp Gly Asn Leu Val Leu His Gln Ala Thr Tyr  
 145                    150                    155                    160

Val Ile Phe Ile Leu  
165

<210> 236  
<211> 218  
<212> PRT  
<213> Homo sapiens

<400> 236

Ser Phe Leu Ser Phe Asn Arg Val Glu Lys Ile Ile Ile Ser Trp Glu  
1 5 10 15

Pro Ser Phe Phe Tyr Tyr His Glu Cys Lys Cys Thr Ser Met Thr His  
20 25 30

Leu Pro Leu Arg Ile Lys Leu Gln Tyr Lys Lys Tyr His Tyr Thr Tyr  
35 40 45

Leu Ser Leu Ser Phe Asn Cys Leu Leu Glu Pro Ile Leu Phe Cys Leu  
50 55 60

Pro Arg Thr Ser Thr Met Asp Tyr Pro Phe Thr Ile Ala Leu Ser Phe  
65 70 75 80

Ser Ser Phe Cys Ile Cys Phe Pro Leu Ile Phe Lys His Asp Val Ile  
85 90 95

Phe Ile Arg Asp Ile Asn Ile Leu Ile Thr Trp Phe Thr Arg Thr Thr  
100 105 110

Pro Ser Ser Val Val Trp Arg Thr Lys Leu Leu Glu Arg Asp Val Gln  
115 120 125

Thr Gln Tyr Leu Tyr Phe Cys Met Pro His Lys Ser Ser Leu Ile Phe  
130 135 140

Ile Leu Ile Ser Leu Leu Lys Asp Val Thr Lys Asp Thr Asn Glu Phe  
145 150 155 160

Gln Lys Ser Pro Asn Pro Met Glu Ile His Phe Pro Leu Ser Leu Ser  
165 170 175

Ser Asn Ile Leu Pro Leu Val Phe Gln Asp Ser Phe Leu Leu Ser Phe  
180 185 190

Leu Leu Thr Leu Phe Ser Ser Leu Lys Ile His Pro Pro Leu Pro Ser  
195 200 205

His Lys Met Leu Arg Val Glu Gly Gly Ser  
210 215

<210> 237  
<211> 139  
<212> PRT  
<213> Homo sapiens

<400> 237

Thr Gln Cys Gln Phe Thr Lys Tyr Thr Ile Ile Tyr Ser Gln Asn Thr  
1 5 10 15

Phe Ile Lys Arg Asn Phe Phe Lys Arg Arg Ser Cys Gln Cys Gln Tyr  
20 25 30

Arg Asn Tyr Lys Asn Pro Phe Leu Phe Pro Leu Glu Ile Pro Ser Leu  
35 40 45

Asp Cys Cys Ser Lys Asn Leu Ile Ser Lys Val Val Ser Leu Ser Leu  
50 55 60

Asp Asn Asp Ile Arg Lys Cys Ser Arg Gln Ile Phe Ser Lys Ile Gln  
65 70 75 80

Ser Ile Trp Tyr Leu Pro Lys Ser Lys Leu Gln Arg Glu Pro Glu Cys  
85 90 95

Ser Pro Thr Ala Phe Ser Ser Ser Thr Gln Trp Ile Ser Tyr Met Leu  
100 105 110

Asn Cys His Val Cys Ala Ser Leu Lys Cys Ala Phe Leu Phe Thr Glu  
115 120 125

Met Arg Asp Val Leu Phe Met Ile Phe Ser Leu  
130 135

<210> 238

<211> 213

<212> PRT

<213> Homo sapiens

<400> 238

Phe Gln Tyr Phe Val Thr Cys Arg Ser Lys Trp Trp His Ala Ser His  
1 5 10 15

Leu Val Asn Ser Arg Ser Cys Cys Val Ser Asn Gly Asp Thr Leu Trp  
20 25 30

Leu Leu Gln Met Val Thr Leu Pro Asn Cys Phe Pro Lys Arg His Val  
35 40 45

Ala Phe Phe Ser Gln Ser Leu Ile Leu Thr Leu Met Val Ile Leu Leu  
50 55 60

Tyr Phe Tyr Met His Leu Val Thr Cys Leu Ile Val Ile Phe Leu Glu  
65 70 75 80

Ile Gln Phe Leu Leu His Arg Val Ser Phe Glu Ile Lys Glu Arg Glu  
85 90 95

Val Ala Asn Leu Gly Cys Asn Asn Phe His Leu Lys Val Asp Pro Cys  
100 105 110

Phe Tyr Tyr Pro Ile Ile Asn Val Phe Cys Phe Pro Leu Ser Ala Ser  
115 120 125  
Tyr Cys Ser Phe Asp Ser Tyr Cys Gln Thr Glu Leu Ser Cys Phe Leu  
130 135 140  
Ala Arg Lys Glu Thr Thr Met Asn Glu Pro Leu Asp Tyr Leu Ala Asn  
145 150 155 160  
Ala Ser Asp Phe Pro Asp Tyr Ala Ala Ala Phe Gly Asn Cys Thr Asp  
165 170 175  
Glu Asn Ile Pro Leu Lys Met His Tyr Leu Pro Val Ile Tyr Gly Ile  
180 185 190  
Ile Phe Leu Val Gly Phe Pro Gly Asn Ala Val Val Ile Ser Thr Tyr  
195 200 205  
Ile Phe Lys Met Arg  
210  
<210> 239  
<211> 168  
<212> PRT  
<213> Homo sapiens  
<400> 239  
Trp Phe Thr Tyr Pro Leu Asn Lys Gln Leu Leu Arg Ile Pro Ala Pro  
1 5 10 15  
Ala Gln Arg Gln Tyr Trp Gly Leu Cys Leu Arg Met Trp Ala Leu Glu  
20 25 30  
Leu Cys Gly Trp Gly Ser Asn Ser Gly Arg Ala Ala Val Arg Pro Trp  
35 40 45  
Thr Ser Gly Ser Ser Lys Thr Asp Arg Gln Phe Ile Phe Ile Leu Val  
50 55 60  
Pro Gln Ile Val Val Leu Leu Ser Asn Tyr Leu Gly Phe Ile Pro Arg  
65 70 75 80  
His Trp Glu Ser Lys Leu Phe Ser Phe Ser Cys Leu Gln Lys Ser Ser  
85 90 95  
Leu Thr Ile His Val Ala Tyr His Trp Ile Gly Leu His Ile Lys His  
100 105 110  
Phe Val Thr Thr Phe Ala Cys Gly Tyr Ile Leu Leu Ser Phe Ser Tyr  
115 120 125  
Phe Leu Leu Ala Leu Leu Glu Tyr Ser His Lys Ser Leu Ser Ser His  
130 135 140  
Phe Trp Pro Pro Phe Asp Ser Phe Ser Leu Leu Cys Cys Cys Glu Ser



His Val Phe Leu Leu Arg Asp Ser Asn Cys Asn Thr Ser Leu Val Phe  
 20 25 30  
 Phe Ala Ser Ser Leu Ile Pro Tyr Gln Gly Lys Ser Ser Glu Leu Ser  
 35 40 45  
 Asn Glu Ile Trp Lys Glu Lys Val Ser Lys Tyr Thr Gln His Tyr Ser  
 50 55 60  
 Thr Ser Phe Ser Leu Gly Leu Ala Ser Leu Gln Arg Glu Tyr Ile Leu  
 65 70 75 80  
 Leu Cys Ala Gly Ser Phe Pro Lys Leu Ile Ser Gly Phe Val Asn His  
 85 90 95  
 Gly Thr Ile Asp Ile Leu Asp Gln Ile Ile Leu Cys Cys Met Ala Cys  
 100 105 110  
 Ser Val Phe Cys Gln Ile Phe Gly Ile Ile Pro Gly Leu Asn Leu Pro  
 115 120 125  
 Asp Ala Asn Ser Thr Phe Ser Leu Lys Thr Ile Glu Ile Phe Gln Asp  
 130 135 140  
 Val Ala Lys Cys Pro Ser Gly Leu Lys Val Ala Pro Asn Ser Asn His  
 145 150 155 160  
 Cys Phe Glu Ala Cys His His Arg Glu Gly Cys Leu Arg Leu Asn Val  
 165 170 175  
 Cys Leu Arg Leu Ile Tyr Thr Pro Lys Ser Asn Ser Thr Val Thr Leu  
 180 185 190  
 Ile Ser Arg Lys  
 195

<210> 242  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<400> 242

Phe Ala Leu Phe Pro Met Phe Ile Ile Ser Leu Asn Gly Thr Pro Ile  
 1 5 10 15  
 Cys Met Val Ala Trp Glu Ile Tyr Gly Ile Ile Leu Glu Pro Ser Phe  
 20 25 30  
 Phe Ile Ile Pro Met Ser Arg Ser Glu Ile Leu Ser Glu Tyr Ala Ser  
 35 40 45  
 Leu Ile Tyr Leu Lys Leu Ala His Phe Lys Phe Leu Ser Ile Leu Thr  
 50 55 60  
 Leu Leu Tyr Leu Asn Asp Tyr His Ser Pro Asn Cys Phe Leu Met Gly

65		70		75		80
Leu Ile Gly Lys	Thr Asn Leu Phe Leu	Ile Leu Pro Leu	Glu Leu Ser			
	85		90		95	
Phe Gln Thr	Arg Met Trp Pro Ser	Phe Phe Leu Thr	Asn Asp Leu Ile			
	100	105	110			
Val Pro Lys Thr	Lys Ser Ile Leu Ser	Leu Asn Asn Ile	Gln Gly Pro			
	115	120	125			
His Ser Arg Ser	Ser Leu Ile Pro Thr	Ser Val Phe Leu Ser	Ser Ser Ser			
	130	135	140			
Pro Ser Gln Ser	Thr Leu Ser His Thr	Arg Tyr Ser Thr	Trp Ser His			
	145	150	155		160	
Ile Lys Leu Leu	Ser Ile Leu Gly Phe	Leu Leu Ala Phe	Asn Pro Leu			
	165	170	175			
Leu Gly Trp Cys	Ile Pro Gly Glu Trp	Ser Asn Pro Cys	Thr Cys Tyr			
	180	185	190			
His Ala Pro Thr	Phe Leu					
	195					
<210>	243					
<211>	180					
<212>	PRT					
<213>	Homo sapiens					
<400>	243					
Leu Cys Asp Gly	Val Met Arg Trp Gly	Arg Arg Val Trp	His His Ala			
1	5	10	15			
Thr Gly Phe Pro	Pro Lys Leu Ser Thr	Pro Arg Ser Thr	Ser Ala Ser			
	20	25	30			
Gly Met Ser Ala	Gly Ser Gln Arg Leu	Trp Arg Arg Gly	Ser Ser His			
	35	40	45			
Ala Val Gln Thr	Phe Asn Pro Leu Gln	Ser Ser Leu Ala	Arg Glu Gln			
	50	55	60			
Gln Ser Leu Leu	Glu Arg Asn Tyr His	Ser Lys Gln Glu	Phe Arg Pro			
65	70	75	80			
His Leu Ser Glu	Asp His Val Glu Val	His Leu Ala Gly	Lys Val Ala			
	85	90	95			
Ser Gly Cys Gly	Leu Phe Asn Tyr Thr	Leu Leu Phe Thr	Leu Phe Thr			
	100	105	110			
Ile Val Cys Lys	Val Gln His Leu Gln	Ala Arg Asn Thr	Gly Leu Pro			
	115	120	125			

His Ser Gly Trp Leu Gly Leu Met Lys Ala Ala Lys Gln Cys Ala Gln  
 130 135 140

Ser Lys Gln Arg Leu Pro Leu Ala Gly Ala His Ser Pro Arg Glu Gly  
 145 150 155 160

Ile Ser Phe Ser Leu Asp Leu Gly Ala Lys Ala Thr His Gly Ser Asp  
 165 170 175

Gln Thr Thr Cys  
 180

<210> 244  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 244

Val Glu Gln Leu Glu Thr His Gly Ser Val Leu Glu Trp Leu Val Trp  
 1 5 10 15

Asp His Phe Leu Gly Asp His Ser Ala Leu Thr Asp Gln Thr Gln Val  
 20 25 30

Asn Gly Thr Cys Pro Leu Pro Phe Pro Pro Gly Phe Gly Thr Val Ala  
 35 40 45

Thr Arg Val Val Phe Pro Ser Arg Gln Leu Leu Arg Val Ile Pro Glu  
 50 55 60

His Ser Leu Gly Ala Cys Ser Val Leu Thr Val Ile Ser Phe Ile Leu  
 65 70 75 80

Thr Ala Ile Pro Phe Cys Ile Phe Ser Gly His Pro Gln Asp His Pro  
 85 90 95

Gly Gln Pro Cys Leu Thr Pro Gly Leu Val Trp Leu His Asp Asn Lys  
 100 105 110

Asp Ala Gly Pro Glu Thr Ile Pro Leu His Gly Ala Cys Ile Phe Pro  
 115 120 125

Leu

<210> 245  
 <211> 181  
 <212> PRT  
 <213> Homo sapiens

<400> 245

Glu Ser Lys Met Leu Ile Gly Gly Ala Pro Pro Gln Cys Val Glu Asp  
 1 5 10 15

Leu Ala Ala Leu Asp Ala Tyr Ser Gln Ala Leu Gly Thr Arg Glu Ala



	20		25		30
Pro Gly Leu Pro Phe Trp Ala Val Asp Leu Trp Gly Arg Ser Trp Pro	35		40		45
Leu Gly Trp Cys His Cys Ser Ser Tyr Pro Lys Cys Pro Phe Tyr Ala	50		55		60
Cys Ser Gly Leu Ala Ser Asn Thr Leu Lys Val Ser Ser Lys Gly Gln	65		70		75
Gly Arg Val Pro Cys Gly Lys Arg Trp Leu Phe Glu Ala Lys Ala Gln	85		90		95
Arg Arg His Ser Gln Arg Met Gly Arg Ala Ala Gly Gln Val Ser Ala	100		105		110
Ser Thr Trp Lys Thr Pro Ala Trp Leu Ala Ala Gly Glu Ile Val Leu	115		120		125
Pro Arg Cys Gln Leu Leu Ser Arg Pro Leu Pro Arg Glu Pro Ser His	130		135		140
Leu Ser Phe Ser Tyr Pro Ser Leu Arg Lys Ala Gln Ala Gln Gly Ala	145		150		155
Met Val Pro Cys Ser Gln Thr Val Ile Ser Glu Trp Pro Leu Val Trp	165		170		175
Gly Pro Arg Val Gln	180				

<210> 246  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 246

Gln Asn Thr Phe Tyr His Ile Asn Ser Cys Thr Met Ile Trp Leu Glu	1	5	10	15
Glu Lys Asn Ser Trp Lys Val Lys Phe Val Leu Lys His Leu Phe Lys	20	25	30	
Ser Leu His Thr Phe Ile Cys Pro Asp Lys Thr Cys Leu Asn Phe Phe	35	40	45	
Leu Lys Gln Leu Tyr Cys Pro Ser Ile Cys Leu Thr Lys Phe Phe Lys	50	55	60	
Gly His Phe Gln Pro Phe Gln Arg His Lys Val Gly Val Pro Lys Pro	65	70	75	80
Pro Phe Leu Ala Leu Pro Val Glu Asn Thr Met Leu His Ser Tyr Met	85	90	95	

Cys Pro Leu Thr Gln Thr Thr Leu Ile Leu Arg Arg Ser Leu Asp Leu  
100 105 110

Lys Leu Leu Leu Leu Ala Val Pro Ala Asn Ser Arg Val Lys Glu Asp  
115 120 125

Val Thr Arg His Thr Tyr Leu Pro Phe  
130 135

<210> 247

<211> 149

<212> PRT

<213> Homo sapiens

<400> 247

Ser Pro Met Leu Gln Phe Tyr Arg Leu Gly Lys Leu Arg Ala Gly Val  
1 5 10 15

Thr Cys Tyr Ser Ser Tyr Pro Gln Thr Tyr Lys Thr Lys Ser Phe Thr  
20 25 30

Glu Val Lys Tyr Asn Leu Phe Gly Leu Leu Phe His Phe Thr Ile Leu  
35 40 45

Ser Leu Leu Val Phe Ile Thr Ile His Ser Lys Glu Phe Ile His Val  
50 55 60

Asp Thr Ser Glu Val Phe Leu Ile Ser Pro Val Arg Pro Val Val Lys  
65 70 75 90

Leu Leu Trp His Tyr Ser Thr Phe Ser Leu Ser Val Phe Phe Pro Ser  
85 90 95

Pro His Arg Ser Glu Leu Ile Ser Pro His Pro Gly Pro Ser Glu Ser  
100 105 110

Phe Val Lys Ser Leu Leu Ser Asn Leu Ser Val Glu Arg Val Pro Leu  
115 120 125

Cys Leu Ser Glu Ile His Thr Val Met Cys His Leu Thr Met Phe Gln  
130 135 140

Ser Val Arg Asp His  
145

<210> 248

<211> 145

<212> PRT

<213> Homo sapiens

<400> 248

Pro Ile Pro Pro Ser Glu Gly Leu Glu Lys Ala Phe Thr Phe Met Ser  
1 5 10 15

Pro Gly Ile Arg Ser Pro Gln Thr Arg Asn Phe Phe Leu Ile Met Glu

	20		25		30										
Val	Trp	Gln	Trp	Ala	Thr	Lys	Pro	Lys	Val	Ser	Val	Leu	Leu	Ser	Asp
	35						40					45			
Ile	Ala	Ser	Leu	Arg	Asn	Arg	Gln	Pro	Gly	Arg	Asp	Gly	Met	Ser	Leu
	50					55					60				
Ile	Lys	Cys	Ser	Ala	Glu	Val	Ser	Ser	Arg	Gly	Leu	Trp	Cys	Cys	Pro
65					70					75					80
Ser	Gly	Cys	Asn	Ile	Cys	Thr	Lys	Pro	Val	Thr	Glu	Tyr	Tyr	Thr	Glu
			85						90					95	
Ser	Val	Val	Pro	Lys	Ile	His	Gly	Phe	Leu	Tyr	Gln	Gly	Leu	Asp	Ile
			100					105					110		
Glu	Ser	Ala	Leu	Val	Thr	Ile	Lys	Trp	Leu	Arg	Asn	Phe	Tyr	Phe	Ile
		115					120					125			
Cys	Pro	Gln	Leu	Arg	Trp	Ile	Arg	Ser	Val	Cys	Ile	Leu	Ala	Ser	Val
	130					135					140				
Cys															
145															

<210> 249  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 249

Leu	Thr	Ser	Val	Ser	Val	Lys	Pro	Lys	Leu	Ser	Lys	Cys	Glu	Ile	
1			5					10					15		
Met	Lys	Cys	Val	Lys	Leu	Leu	Ile	Gln	Cys	Leu	Arg	Gln	Gln	Asn	Ser
			20					25					30		
Arg	Leu	Ile	Ile	Gln	Ser	Ile	Gln	Thr	Thr	Phe	Tyr	Gly	Asp	Asn	Leu
	35					40						45			
Trp	Ser	Glu	Arg	Leu	His	Lys	Cys	Ser	Phe	His	Ser	Tyr	Ser	Ser	Ser
	50					55					60				
Asn	Thr	Lys	Leu	Leu	Ser	Ile	Pro	Glu	Leu	Lys	Met	Thr	Leu	Leu	Thr
65					70					75				80	
Asp	Leu	Tyr	Leu	Phe	Ile	Cys	His	Phe	Ser	Arg	Arg	Thr	Ala	Ile	Leu
			85						90					95	
Pro	Gln	Ser	Pro	Tyr	Ala	Phe	Val	Glu	Ser	Trp	Leu	Lys	Pro	Gln	Ala
			100					105					110		
Leu	Cys	Lys	Ala	Phe	Leu	Gly	Ile	Asp	Ile	Thr	Thr	Ile	Pro	Gln	Asn
	115					120						125			

Leu Leu Val Leu His Ala Ile Ser Gly Pro Trp Thr His Phe Tyr Cys  
 130 135 140

Asn Lys  
 145

<210> 250  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens  
 <400> 250

Phe Thr Gln Glu Ser Ser Arg Pro Ser Thr Phe Gly Ala Asn Leu Glu  
 1 5 10 15

Leu Gly Cys Arg Pro Ala Gly Thr Phe Ile Lys Cys Tyr Tyr Phe Ile  
 20 25 30

Phe Ala Ser Glu Glu Leu Pro Asp Phe Val Lys Thr Leu Cys Asn Pro  
 35 40 45

Ser Pro Phe Phe Trp His Ser Arg Gln Leu Asn Lys His Leu Leu Thr  
 50 55 60

Pro Leu Leu Cys Val Ile Arg Cys Glu Arg His Trp Arg Tyr Glu Glu  
 65 70 75 80

Pro Met Val Ser

<210> 251  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens  
 <400> 251

Ala Pro Trp Gly Trp Ala Ser Val Ser Val Cys Ala Arg Leu Glu Met  
 1 5 10 15

Ala Ser Arg Tyr Gly Leu Gln Glu His His Glu Val His Leu Ile Phe  
 20 25 30

Ala Phe Leu Cys Gln His Val Cys His Leu Gln Cys Leu Thr Glu His  
 35 40 45

Val Gly Pro Ala Met Trp Ala Val Ser Leu Pro Ser Ser Tyr  
 50 55 60

<210> 252  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens  
 <400> 252

Lys Lys Glu Pro Thr Met Ile Trp Ile Leu Leu Ser Phe Leu Phe Ser  
 1 5 10 15  
 Gln Met Val Ile Leu Lys Leu Ile Glu Val Val Tyr Arg Val His Ser  
 20 25 30  
 His Thr Val Arg Lys Arg Gln Ser Gln Gly Leu Asn Ser Ser Ser Leu  
 35 40 45  
 Thr Ile Glu Pro Ile Phe Leu Ile Thr Ile Gln Tyr Phe Pro Ile Cys  
 50 55 60  
 Ser Ile Lys Arg Asn His Phe Ser Glu Trp Arg Asn Ile His Glu Asn  
 65 70 75 80  
 Lys Ser Ile Ile Gln Asp Thr Cys Lys Ala Ser Arg His Ser Arg Phe  
 85 90 95  
 Arg Leu Leu Ala Pro Trp Pro Arg Leu Ile Thr Phe Gln Glu Asn Lys  
 100 105 110  
 Thr Thr Tyr Gln Asp  
 115  
 <210> 253  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens  
 <400> 253  
 Thr Phe Ile Lys His Phe Phe Ser Gly Leu Ser Phe Ser Pro Ser Cys  
 1 5 10 15  
 His Val Ala Ile Ile Ile Phe Thr Ser Ala Ser Ala Tyr Phe Lys Pro  
 20 25 30  
 His Asn Lys Leu Leu Ala Phe Phe Phe Ala Ile Asp Asn Asn Leu Lys  
 35 40 45  
 Met Thr Gln Asn Phe Asn Gly Phe Ile Tyr Pro Gln Phe Tyr Asp Phe  
 50 55 60  
 Arg Ser Ser Phe Leu Cys Val Asp Leu Leu Ile Tyr His Phe Leu Ser  
 65 70 75 80  
 Thr Ile Thr Ser Phe Asn Leu Ser Cys Ser Thr Gly Leu Leu Thr Ile  
 85 90 95  
 Asn Phe Phe Ser Phe Ser Leu Ser Lys Asn His Leu Phe Ser Leu His  
 100 105 110  
 Phe Cys Lys Ile Phe Ser Arg Val Ile Lys Phe Val Thr Ile Phe Phe  
 115 120 125  
 Glu Tyr Phe Lys Asp Leu  
 130

<210> 254  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

<400> 254

Thr	Phe	Leu	Ser	Arg	His	Phe	Leu	Met	Trp	Lys	Arg	Phe	Thr	Glu	Ser
1				5					10					15	
Asp	Thr	Phe	Lys	Gly	Leu	Thr	Arg	Asp	Ile	Cys	Cys	Leu	Cys	Leu	Leu
			20					25					30		
Phe	Ser	Trp	Arg	Ser	Ala	Thr	Asn	Lys	Ala	Ser	Ser	Thr	Gln	Gly	His
		35					40						45		
Leu	Ser	Thr	Gly	Leu	Phe	Leu	Ser	Ser	Ser	His	Asn	Leu	Ser	Cys	His
	50					55					60				
Thr	Ile	Thr	Ser	Thr	Thr	Ser	Leu	Gly	Pro	Cys	Ser	Glu	Pro	Thr	Phe
65					70					75					80
Phe	Leu	Pro	Gln	Val	Gly	Ile	Ala	Ser	Ala	Pro	Tyr	Cys	Leu	His	Ser
				85					90					95	
Glu	Gly	Ser	Tyr	Val	His	Ala	Leu	Asn	Lys	Phe	Val	Ser	Pro	Ile	Asn
			100					105						110	
Val	Pro	Phe	Ala	Ser	Phe	Phe	Ser	Glu	Thr	Ser	Glu	Val	Gln	Arg	Gln
		115					120						125		
Pro	Leu	Pro	Ser	Ser	Arg	Cys	Ser	Thr	Tyr						
	130					135									

<210> 255  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 255

Cys	Lys	Thr	Gly	Gly	Leu	Lys	Leu	Ile	Phe	Arg	His	His	Gly	Ile	Leu
1				5					10					15	
Tyr	Arg	Leu	Ser	Leu	Tyr	Leu	Glu	Asp	Val	Arg	Leu	Met	Glu	Val	Leu
			20					25					30		
Ser	Ile	Leu	Phe	Pro	Leu	Leu	Ile	His	Ser	Phe	Leu	Phe	Thr	Glu	Arg
		35					40						45		
Leu	Asn	Phe	Leu	Ser	His	Ile	Ser	Val	Leu	Leu	Ala	Pro	Leu	Phe	Phe
	50					55					60				
Pro	Leu	Leu	Gln	Lys	Ser	Gln	Pro	Gln	Lys	Gln	Ser	Thr	Tyr	Cys	Glu
65					70					75					80



<210> 257  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 257

His	Phe	Leu	Pro	His	Ile	Leu	Glu	Leu	Val	Leu	Phe	Leu	Ile	Lys	Ile
1				5					10					15	
Asn	Val	Ile	Phe	Arg	Gly	Ala	Ile	Phe	Cys	Phe	Gln	Asp	Phe	Phe	Lys
		20						25					30		
Glu	Val	Ile	Leu	Lys	Ala	Lys	Phe	Lys	Glu	Lys	Glu	Leu	Val	Ala	Leu
		35					40					45			
Val	Asp	Pro	Val	Gly	Ser	Ser	Phe	Leu	Cys	Trp	Ser	Ile	Phe	Cys	Ile
	50					55					60				
Pro	Phe	Glu	Phe	Ala	Phe	Leu	Phe	Asn	Ile	Phe	Trp	Tyr	Ser	Arg	Phe
65					70					75					80
Leu	Phe	Phe	Gly	Thr	Phe	Val	His	Ile	Asn	Phe	Leu	Val	Trp	Arg	Arg
				85					90					95	
Gly	Ile	Leu	Ile	Ala	Asn	Gly	Thr	Lys	Val	Tyr	Arg	Asp	Ile	Val	Gln
		100						105					110		
Pro	Leu	Leu	Phe	Phe	Leu	Phe	Leu	His	Ser	Ile	Leu	Val	Met	Gly	Asn
		115					120					125			

<210> 258  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<400> 258

Lys	Gln	Ser	Tyr	Ile	Cys	Ile	Leu	Phe	Tyr	Ile	Tyr	Phe	Val	Ile	Phe
1				5					10					15	
Leu	Leu	Ser	Thr	Val	Ser	Ser	Leu	Leu	Pro	Phe	Leu	Ile	Glu	Glu	Phe
			20					25					30		
Asn	Ala	Cys	Ile	Cys	Val	Phe	Ala	Lys	Lys	Thr	Pro	Ser	Ile	Thr	Cys
		35					40					45			
Ser	Ile	Tyr	Glu	Tyr	Phe	Trp	Pro	Leu	Thr	Gln	Lys	Val	Leu	Tyr	Tyr
	50					55					60				
Arg	Gln	Lys	Ser	Thr	Arg	Lys	Gln	Ser	Gly	Thr	Ser	Ser	Lys	Arg	Asp
65					70					75					80
Ser	Ile	Val	Gly	Lys	Asn	Thr	Asp	Pro	Gly	Gly	Lys	Leu	Pro	Gly	Leu
				85					90					95	



Glu Ser Gln Leu Tyr Tyr Phe Gly Lys Thr Thr Tyr Leu Leu Tyr Leu  
 100 105 110  
 Phe Trp Tyr Pro Cys Leu Asn Gly Ser Asn Asn Asn Pro Leu Ile Ala  
 115 120 125  
 Leu Leu Gly Phe Asn Arg Ser Glu Asp Phe Arg Arg Ala His Asp Lys  
 130 135 140  
 Asn Tyr Ile Arg Val Thr Tyr Tyr Cys Tyr Pro Ile Cys His Ser Lys  
 145 150 155 160  
 Leu Arg Asp Leu Gly Gln Val Thr  
 165  
 <210> 259  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens  
 <400> 259  
 Leu Val Glu Trp Ala His Ser Ser Met Arg Pro Ile Phe His Leu Asn  
 1 5 10 15  
 Phe Leu Cys Leu Arg Asn Glu Leu Tyr Ser Asn Leu Cys Phe Leu Lys  
 20 25 30  
 Ile Asn Val Phe Leu Val Lys His Leu Val Ser Ser Gln Ile Leu Phe  
 35 40 45  
 Lys Lys Thr Thr Glu Asn Ser Glu Glu Gly Glu Thr Asp Ser Ala Asn  
 50 55 60  
 Ser Ile Ser Val Pro Arg Leu Asn Trp Glu Met Leu Leu Leu His Asp  
 65 70 75 80  
 Leu Gly Leu Ile Ile Cys Leu Gln Glu His Cys Phe Arg Val Val Trp  
 85 90 95  
 Tyr Ser Gly Arg Asn Gly Leu Trp Ser Glu Ile His Val Gln Ile Pro  
 100 105 110  
 Ser His Leu Pro Ser Leu Ile Leu Ser Phe Leu Ile Cys Lys Met Thr  
 115 120 125  
 Ile Ile Asn Thr Ile Ser Lys Ile Cys Gly Asp Asn Thr Ala Phe Thr  
 130 135 140  
 Ser Cys Cys Ile Leu Pro Ile Ser Ser Cys Arg Asp Arg Ile Phe His  
 145 150 155 160  
 Phe Ile Leu Ile Tyr Asn Tyr Val Ile Pro Phe Lys Asn His Pro Ser  
 165 170 175  
 Thr Phe Ser Ser Thr Arg  
 180

<210> 260  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<400> 260

Cys Ser Leu Leu Asp Phe Leu Met Leu Val Gly Ala Leu Arg Lys Leu  
 1 5 10 15

Cys Thr Lys Leu Asp Pro Val Leu Gln Gly Ser Asp Leu Thr Glu His  
 20 25 30

Ser Ala Trp Gly Val Pro Leu Ile Trp Thr Trp Asn Ser Ile Ile Gln  
 35 40 45

Arg Pro Ser Leu Pro Cys Ser Leu Cys Val Thr Gly Ala Ala Glu Thr  
 50 55 60

Gln Val Leu Ser Ala Ser Ala Gly Leu Gln Pro Cys Leu Cys Leu Leu  
 65 70 75 80

Arg Ser Asp Ser Asn Cys Tyr Leu Trp Arg Trp Leu Phe Ile Gly Thr  
 85 90 95

Pro Phe Leu Cys Leu Thr Glu Ala Gln Cys Ser Lys Leu Glu Gly Leu  
 100 105 110

Cys Gln His Val Ser His Thr His Leu Leu Leu Phe Phe Ser Arg Val  
 115 120 125

Leu Gly His Leu Leu Leu His Ile Thr Thr Ser Ser Pro Pro Ala Gln  
 130 135 140

Leu Ala Leu Ser Pro Phe Pro Ile Tyr His Ala Val Leu Glu His Lys  
 145 150 155 160

Ala Leu Leu Cys Ile Pro Cys Val Tyr Phe Val Val Met Cys Cys Ile  
 165 170 175

Leu Lys Glu Leu Asn Leu Cys Pro Gly Ser Arg Lys Asn Ala Asp Gln  
 180 185 190

Leu Leu Ala Ile Asp Gly Phe Asn Ile Ser Tyr Asp Trp Phe Leu  
 195 200 205

<210> 261  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 261

Gln Thr Lys Glu Glu Lys Gly Gln Val Lys His Thr Ile Gly Phe Thr  
 1 5 10 15

Val Asn Met Ser Lys Val Leu Leu Ile Ile His Phe Met Tyr Pro Arg  
20 25 30  
Leu Trp Lys Lys Phe Phe Phe His Leu Pro Ile Lys Asn Ile His Leu  
35 40 45  
Gly Ile Thr Thr Ser Trp Ile Leu Leu Asp Arg His Thr Thr Thr Leu  
50 55 60  
Thr Val Leu Pro Ser Ser Arg Arg Leu Ala Arg Lys Ala His His Pro  
65 70 75 80  
Leu Pro Gly Ser Lys Val Asp Ser Leu Ile Phe Cys Ile Asn Pro Thr  
85 90 95  
Pro Asp Ser Phe Ser Tyr Ser Leu Leu Pro Cys Leu Phe Ser Tyr Leu  
100 105 110  
Met Val Asn Val Phe Leu Ser Ser Cys Ile Thr Phe Tyr Ser Phe Leu  
115 120 125  
Glu His Ile Ile Ile Ile Asn Lys Lys Ser Lys Ile Ala Met Val Ala  
130 135 140  
Arg Ile Pro Ala Pro Leu Asp Pro Ser Thr Ser Ser Ser Pro Gly His  
145 150 155 160  
Thr Trp Gln Arg Glu Ile Lys Val Leu Asp Gly Ile Lys Val Asn Gln  
165 170 175  
Leu Thr Leu Lys Gly Glu Lys Glu Ser Arg Leu  
180 185  
<210> 262  
<211> 149  
<212> PRT  
<213> Homo sapiens  
<400> 262  
Tyr Val Thr Ile Leu Leu Thr Val Leu Val Phe Leu Leu Arg Ser Leu  
1 5 10 15  
Pro Phe Gly Ile Arg Trp Ala Leu Ser Thr Gly Ile His Leu Asp Leu  
20 25 30  
Glu Val Ile Phe Cys His Val His Leu Val Ser Ile Phe Leu Ser Pro  
35 40 45  
Leu Asn Gly Ser Ala Asn Pro Val Ile Tyr Phe Phe Val Gly Ser Phe  
50 55 60  
Arg Gln Arg Gln Asn Arg Gln Asn Leu Lys Leu Val Leu Gln Arg Ala  
65 70 75 80  
Leu Gln Asp Met Pro Glu Val Lys Val Glu Gly Gly Phe Leu Arg Glu  
85 90 95

Pro Trp Ser Cys Arg Glu Ala Asp Ser Gly Ser Glu Glu Glu Pro Leu  
 100 105 110  
 Pro Cys Gln Ser Asp Gly Thr Leu Arg Ala Ile Leu Pro Cys His Ala  
 115 120 125  
 Gln Leu His Ala Phe Ser Cys Cys Ala Ser Glu Met Ser Gln Arg Leu  
 130 135 140  
 Lys Val Val Glu Met  
 145  
 <210> 263  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens  
 <400> 263  
 His Trp Arg Ser Leu Val Thr Trp Ala Glu Tyr Leu Glu Pro Arg Ile  
 1 5 10 15  
 Ser Ser Ser Met Val Asp Gln Leu Cys Asp Gly Val Met Arg Trp Gly  
 20 25 30  
 Arg Arg Val Trp His His Ala Thr Gly Phe Pro Pro Lys Leu Ser Thr  
 35 40 45  
 Pro Arg Ser Thr Ser Ala Ser Gly Met Ser Ala Gly Ser Gln Arg Leu  
 50 55 60  
 Trp Arg Arg Gly Ser Ser His Ala Val Gln Ser Phe Asn Pro Leu Gln  
 65 70 75 80  
 Ser Ser Leu Ala Arg Glu Gln Gln Ser Leu Leu Glu Arg Asn Tyr His  
 85 90 95  
 Ser Lys Gln Glu Phe Arg Pro His Leu Ser Glu Asp His Val Glu Val  
 100 105 110  
 His Leu Ala Gly Lys Val Ala Ser Gly Cys Gly Leu Phe Asn Tyr Thr  
 115 120 125  
 Leu Leu Phe Thr Leu Phe Thr Ile Val Cys Lys Val Gln His Leu Gln  
 130 135 140  
 Ala Arg Asn Thr Gly Leu Pro His Ser Gly Trp Leu Gly Leu Met Lys  
 145 150 155 160  
 Ala Thr Lys Gln Cys Ala Gln Ser Lys Gln Arg Leu Pro Leu Ala Gly  
 165 170 175  
 Ala His Ser Pro Arg Glu Gly Ile Ser Phe Ser Leu Asp Leu Gly Ala  
 180 185 190  
 Lys Ala Thr His Gly Ser Asp Gln Thr Thr Cys Ser Pro His Leu

195                      200                      205  
 <210> 264  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 264  
  
 Gly Ala Ser Ser Gln Tyr Gly Asn Glu Asp Gly Val Asn Leu Phe Pro  
 1                      5                      10                      15  
  
 Leu Met Ser Pro Pro Leu Tyr Thr Asn Leu Leu Lys Pro Thr Gly Lys  
                     20                      25                      30  
  
 Leu Arg Leu Gly Asn Lys Asn Ile Lys Cys Tyr Val Gln Ile Leu Lys  
                     35                      40                      45  
  
 Trp Asn Leu Lys Leu Leu Val Leu Gln Leu Phe Leu Lys Ile Pro Thr  
                     50                      55                      60  
  
 Leu Ser Arg Ser Met Ser Phe Arg Glu Arg Thr Tyr Val Ala Arg Glu  
 65                      70                      75                      80  
  
 Lys Ser Lys Glu Ser Met Asn Pro Val Leu Leu Ser Ile Leu Gln Cys  
                     85                      90                      95  
  
 Trp Arg Pro Phe Ser Ile Phe His Ser Leu Gly Gln Ser Phe Asn Thr  
                     100                      105                      110  
  
 His Leu Leu Lys Ala Ile Tyr Ile Arg Pro Cys Tyr Ser Lys Gly Thr  
                     115                      120                      125  
  
 Val Gly Gly Glu Glu Arg Gln Asp Pro Thr Met Glu Leu Lys Ser Ser  
                     130                      135                      140  
  
 Leu Asp Arg Phe Pro Phe Pro Ser Gly Gln Ser Lys Pro Asn Asp Thr  
 145                      150                      155                      160  
  
 Thr Val Ser Ser Phe Pro Glu Gln Arg Asp Val Glu Asn Tyr Leu Phe  
                     165                      170                      175  
  
 Thr Ile Val Arg Arg Arg Gln Gly Trp Asn Phe Phe Gln Asn Lys Leu  
                     180                      185                      190  
  
 Phe Phe Phe Val Lys Gln Gly Lys Ile Leu Leu Leu  
                     195                      200  
  
 <210> 265  
 <211> 186  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 265  
  
 Ile Ser Val Thr Asp Leu Ile Gly Gly Lys Trp Ile Phe Gly His Phe  
 1                      5                      10                      15

Phe Cys Asn Val Phe Ser Val Asn Val Met Cys Cys Thr Ala Trp Ile  
20 25 30  
Leu Thr Leu Tyr Val Ile Ser Ile Asp Arg Tyr Leu Gly Ile Met Lys  
35 40 45  
Pro Leu Thr Tyr Pro Met Arg Gln Lys Gly Lys Cys Met Thr Lys Met  
50 55 60  
Ile Leu Ser Val Cys Leu Leu Ser Ala Phe Val Thr Leu Pro Thr Ile  
65 70 75 80  
Phe Gly Arg Ala Gln Asn Val Asn Asp Asp Lys Val Cys Leu Val Ser  
85 90 95  
Gln Asp Phe Gly Tyr Thr Ile Tyr Ser Thr Ala Leu Ala Ser Ser Pro  
100 105 110  
Cys Ala Ser Cys Phe Ser Cys Thr Asn Arg Phe Thr Arg Pro Pro Gly  
115 120 125  
Lys Ala Arg Pro Asn Thr Gly Tyr Leu Ala Ser Leu Glu Trp Ser Gln  
130 135 140  
Thr Ala Val Val Thr Leu Asn Gly Thr Val Lys Phe Gln Glu Val Glu  
145 150 155 160  
Glu Cys Ala Lys Leu Ser Arg Leu Leu Lys His Glu Arg Lys Lys Tyr  
165 170 175  
Leu His Leu Ala Glu Thr Glu Ser Ser Asp  
180 185  
<210> 266  
<211> 184  
<212> PRT  
<213> Homo sapiens  
<400> 266  
Phe Thr Val Ile Asn Val Cys Ser Cys Thr Cys Glu Val Lys Ser Phe  
1 5 10 15  
Ser Leu Leu Ser Asn Ser Tyr Val Pro Asn Ile Phe Ser Lys Phe Leu  
20 25 30  
Lys Thr Tyr Asn Gly Glu Lys Asn Asn Pro Phe Ser Ser Pro Ala Ser  
35 40 45  
Leu Met Lys Asn Ser His Phe Ser Leu Phe Leu Leu Phe Leu Leu Val  
50 55 60  
Val Phe His Ile Ser Cys Leu Ser Ala Val Ser Cys Phe Met Gln Phe  
65 70 75 80  
Arg Pro Tyr Leu Leu Thr Ser Leu Ser Phe Gln Tyr Lys Asp Ser Cys

	85		90		95
Ile Phe Ser Phe Asn Phe Thr Phe Leu Asn Ser Pro Phe Pro Phe Cys	100		105		110
Asp Pro Gly Ile Ser Gly Val Leu Phe Phe Phe Ile Leu Pro Asp Phe	115		120		125
Ile Tyr Ile Cys Val Tyr Ser Phe Leu Leu Phe Phe Lys Leu Lys Thr	130		135		140
Cys Leu Ser Ser Lys Ser Gly Ser Phe Phe Phe Ser Trp Arg Pro Leu	145		150		155
Ser Gln Asn Pro Leu Ser Phe Cys Phe Asn Glu Asp Tyr Met Leu Ser	165		170		175
Leu Trp Leu Pro Ser Cys Asn Thr	180				
<210> 267					
<211> 201					
<212> PRT					
<213> Homo sapiens					
<400> 267					
Phe Pro Ser Leu Lys Asn Met His Phe Ser Val Pro Leu Arg Cys His	1	5	10		15
Thr Ile Ile Ser Val Gln Lys Arg Val Asn Thr Ala Asp Pro Arg Leu	20		25		30
Leu Leu Leu Lys Cys Pro Ala Cys Lys Ala Gly Ser Trp Leu Val Phe	35		40		45
Gly Val Leu Asp Phe Glu Lys Leu Pro Thr Ile Pro Ser Thr Gly Leu	50		55		60
Cys Lys Tyr Gly Leu Tyr Ile Pro Ala Phe Leu Leu Glu Leu Glu Phe	65		70		75
Ser Lys Tyr Glu Ala Lys Arg Ala Tyr Val Thr Ser Pro Gln Pro Trp	85		90		95
Ala Leu Ser His Gly Thr Ser Leu Ala Gly Ser Val Ser His Val Leu	100		105		110
Ser Gln Phe Leu Ala Glu Arg Ile Lys His Ile Leu Cys Asn Phe Thr	115		120		125
Gly Lys Arg Ile Leu Glu Ala Val Pro Gly Phe Phe Arg Leu Phe Leu	130		135		140
Met His Leu Phe Leu Leu Leu Ile Met Leu Arg Tyr Pro Ser Val Asn	145		150		155
					160

Lys Ser Leu Ile Gln Leu Tyr Ala Lys Ser Tyr Glu Ser Gln Asn Arg  
 165 170 175  
 Gly Ile Ile Leu Gly Arg Pro Asp Thr Thr Lys Ile Asn Leu Lys Leu  
 180 185 190  
 Asn Ser Ser Pro Thr Ser Leu Ser Pro  
 195 200  
 <210> 268  
 <211> 321  
 <212> PRT  
 <213> Homo sapiens  
 <400> 268  
 Met Asn Gln Thr Leu Asn Ser Ser Gly Thr Val Glu Ser Ala Leu Asn  
 1 5 10 15  
 Tyr Ser Arg Gly Ser Thr Val His Thr Ala Tyr Leu Val Leu Ser Ser  
 20 25 30  
 Leu Ala Met Phe Thr Cys Leu Cys Gly Met Ala Gly Asn Ser Met Val  
 35 40 45  
 Ile Trp Leu Leu Gly Phe Arg Met His Arg Asn Pro Phe Cys Ile Tyr  
 50 55 60  
 Ile Leu Asn Leu Ala Ala Ala Asp Leu Leu Phe Leu Phe Ser Met Ala  
 65 70 75 80  
 Ser Thr Leu Ser Leu Glu Thr Gln Pro Leu Val Asn Thr Thr Asp Lys  
 85 90 95  
 Val His Glu Leu Met Lys Arg Leu Met Tyr Phe Ala Tyr Thr Val Gly  
 100 105 110  
 Leu Ser Leu Leu Thr Ala Ile Ser Thr Gln Arg Cys Leu Ser Val Leu  
 115 120 125  
 Phe Pro Ile Trp Phe Lys Cys His Arg Pro Arg His Leu Ser Ala Trp  
 130 135 140  
 Val Cys Gly Leu Leu Trp Thr Leu Cys Leu Leu Met Asn Gly Leu Thr  
 145 150 155 160  
 Ser Ser Phe Cys Ser Lys Phe Leu Lys Phe Asn Glu Asp Arg Cys Phe  
 165 170 175  
 Arg Val Asp Met Val Gln Ala Ala Leu Ile Met Gly Val Leu Thr Pro  
 180 185 190  
 Val Met Thr Leu Ser Ser Leu Thr Leu Phe Val Trp Val Arg Arg Ser  
 195 200 205  
 Ser Gln Gln Trp Arg Arg Gln Pro Thr Arg Leu Phe Val Val Val Leu  
 210 215 220



Ala Ser Val Leu Val Phe Leu Ile Cys Ser Leu Pro Leu Ser Ile Tyr  
 225 230 235 240

Trp Phe Val Leu Tyr Trp Leu Ser Leu Pro Pro Glu Met Gln Val Leu  
 245 250 255

Cys Phe Ser Leu Ser Arg Leu Ser Ser Ser Val Ser Ser Ser Ala Asn  
 260 265 270

Pro Val Ile Tyr Phe Leu Val Gly Ser Arg Arg Ser His Arg Leu Pro  
 275 280 285

Thr Arg Ser Leu Gly Thr Val Leu Gln Gln Ala Leu Arg Glu Glu Pro  
 290 295 300

Glu Leu Glu Gly Gly Glu Thr Pro Thr Val Gly Thr Asn Glu Met Gly  
 305 310 315 320

Ala

<210> 269  
 <211> 9  
 <212> PRT  
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<220>  
 <223> Novel Sequence

<400> 269

Ala Pro Arg Thr Pro Gly Gly Arg Arg  
 1 5

<210> 270  
 <211> 20  
 <212> DNA  
 <213> Artificial

<220>  
 <223> Novel Sequence

<400> 270  
 ctgtctctct gtcctcctcc

20

<210> 271  
 <211> 22  
 <212> DNA  
 <213> Artificial

<220>  
 <223> Novel Sequence

<400> 271  
 gcaccgatct tcattgaatt tc

22

<210> 272  
<211> 33  
<212> DNA  
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<220>  
<223> Novel Sequence

<400> 272  
gatcaagctt ggatgaacca gactttgaat agc

33

<210> 273  
<211> 31  
<212> DNA  
<213> Artificial

<220>  
<223> Novel Sequence

<400> 273  
gatcctcgag ctcaagcccc catctcattg g

31